

SOUTH BAY OCEAN OUTFALL MONTHLY RECEIVING WATERS MONITORING REPORT

SOUTH BAY WATER RECLAMATION PLANT

NPDES Permit No. CA0109045 SDRWQCB Order No. R9-2013-0006

SEPTEMBER 2020

Environmental Monitoring and Technical Services 2392 Kincaid Road • Mail Station 45A • San Diego, CA 92101 Tel (619) 758-2300 Fax (619) 758-2309





October 31, 2020

Mr. David W. Gibson, Executive Officer California Regional Water Quality Control Board San Diego Region 2375 Northside Drive, Suite 100 San Diego, CA 92108

Attention: POTW Compliance Unit

Dear Mr. Gibson:

Enclosed is the September 2020 Monthly Receiving Waters Monitoring Report for the South Bay Ocean Outfall, South Bay Water Reclamation Plant as required per Order No. R9-2013-0006 as amended by Order Nos. R9-2014-0071 and R9-2017-0023, NPDES Permit No. CA0109045.

This report includes raw ocean monitoring data and summaries of water quality parameters and ocean conditions measured during the month for the South Bay outfall region. Also included are summaries of compliance with the bacterial water-contact standards specified in the California Ocean Plan. These data are also presented in the monthly report submitted by the International Boundary and Water Commission, U.S. Section for discharge from the South Bay International Wastewater Treatment Plant (Order No. R9–2014–0009 as amended by Order Nos. R9–2014–0094, R9–2017–0024, R9–2019–0012, NPDES Permit No. CA0108928).

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Peter S. Vroom, Ph.D.

Deputy Director, Public Utilities Department

PV/rk

cc: U.S. Environmental Protection Agency, Region 9

INTRODUCTION

Monthly reports of water quality and ocean conditions from Playa Blanco, Mexico to Coronado, USA are submitted to the San Diego Regional Water Quality Control Board and U.S. EPA Region 9 in accordance with Order No. R9-2013-0006 as amended by Order Nos. R9-2014-0071 and R9-2017-0023, NPDES Permit No. CA0109045, for the South Bay Water Reclamation Plant (SBWRP), South Bay Ocean Outfall (SBOO). This report includes receiving waters monitoring data collected from all shore, kelp and offshore stations specified in the above order. Data for influent and effluent monitoring activities for the SBWRP are presented in separate reports.

MATERIALS AND METHODS

Shore Stations

Water quality monitoring was conducted at 11 stations located along the shore from Playa Blanca, Mexico to Coronado, USA (see station locations map). Three sites are located south of the international border (stations S0, S2, S3), while eight sites are in the United States (stations S4–S6 and S8–S12).

Seawater samples were collected from the surf zone at each station on a weekly basis. These samples were subsequently transported to the City's Marine Microbiology Laboratory and analyzed for the presence of total coliform, fecal coliform, and *Enterococcus* bacteria. Visual observations of water color and clarity, surf height, human or animal activity, and weather conditions were recorded at the time of sample collection. Wind speed and direction were measured using a hand-held anemometer with a compass.

Kelp Bed Stations

Seven kelp bed and other nearshore stations (I19, I24, I25, I26, I32, I39, I40; collectively referred to as "kelp" stations herein) were sampled four times during the month according to NPDES permit specifications. Six stations (I19, I24, I25, I26, I32, I40) are located along the 9- m depth contour, and one (I39) is located along the 18-m depth contour. Three of these stations, I25, I26, and I39, were selected based on their proximity to suitable substrates for the Imperial Beach kelp bed (see station locations map); however, this kelp bed has been historically transient and variable in terms of size and density. Thus, these three stations are only occasionally located within an area where kelp is actually found.

The seven kelp stations are sampled on a weekly basis during the month. Routine monitoring at each kelp site consists of collecting seawater samples at three discrete depths for bacteriological analyses (total coliforms, fecal coliforms, and *Enterococcus* bacteria) and generating water column profiles of various physical/chemical parameters, including water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, and transmissivity. Visual observations of weather and water conditions are also recorded at all stations.

Seawater samples at the kelp bed stations are primarily collected using a CTD-integrated rosette sampler with Niskin bottles. Aliquots for bacteriological analyses were drawn from these bottles into sterile sample bottles for processing at the City's Marine Microbiology Laboratory. Water column profiles of the various physical/chemical parameters were taken using a CTD. The CTD collected these physical/chemical data at a rate ≥ 4 scans per second. The data were then internally averaged using the CTD proprietary software, Seasoft, to create water column profiles equivalent

to one reading per meter. Additionally, CTD profile data for each water sample depth are presented with the bacteriological data.

Offshore Stations

Quarterly offshore water quality sampling is typically conducted over three days during February, May, August, and November for a total of 40 stations during each month (see station locations map). These offshore stations (I1–I40) are arranged in a grid surrounding the discharge site, and are generally located along the 9, 19, 28, 38, and 55-m depth contours. The seven offshore sites designated as kelp bed stations (described above) are included as part of the monthly offshore water quality sampling, however the data from these seven stations are reported within the kelp bed station section of the report with the other four days of kelp bed water quality sampling. Monitoring at all sites included measurements of various physical/chemical parameters, including water temperature, salinity, density, dissolved oxygen, pH, chlorophyll *a*, transmissivity, and chromomorphic dissolved organic matter (CDOM). Visual observations of weather and water conditions were also recorded at all stations. Seawater samples for the analysis of indicator bacteria, suspended solids, and oil and grease concentrations were collected at 28 of the stations.

At these offshore stations, water samples for bacteriological analyses were collected using a rosette sampler with Niskin bottles. Measurements of the physical/chemical parameters listed above were taken using a Sea-Bird CTD. Additionally, CTD profile data for depths closest to those at which bacteriological samples were collected were extracted from the CTD profiles and are presented with the bacteriological data.

Bacteriological Reporting and Quality Assurance

Estimated values for bacteriological analyses are denoted by greater than (>), less than (<), or estimated (e) qualifiers and result from plates with colony counts above or below the permissible counting limits established in Bordner et al. (1978)¹. This document defines membrane filtration limits of 20–80 colonies per plate for total coliforms and 20–60 colonies per plate for fecal coliforms and *Enterococcus*. No Data (ND) is reported if plate counts from all dilutions have a total colony count of >200 per plate.

Results of the bacteriological analysis of seawater samples collected from each of the shore, kelp bed, and offshore stations located within State waters are assessed relative to the geometric mean and single sample maximum water-contact standards specified in the California Ocean Plan (Ocean Plan). The seven standards are defined as follows:

<u>30-day Geometric Mean</u>: The following standards are based on the geometric mean of the five most recent samples from each site.

- (1) Total coliform density shall not exceed 1000 CFU/100 mL;
- (2) Fecal coliform density shall not exceed 200 CFU/100 mL;
- (3) Enterococcus density shall not exceed 35 CFU/100 mL.

¹ Bordner, R., J. Winter, and P. Scarpino (eds.). (1978). Microbiological Methods for Monitoring the Environment: Water and Wastes, EPA Research and Development, EPA-600/8-78-017. 337 p.

Single Sample Maximums:

- (1) Total coliform density shall not exceed 10,000 CFU/100 mL;
- (2) Fecal coliform density shall not exceed 400 CFU/100 mL;
- (3) Enterococcus density shall not exceed 104 CFU/100 mL;
- (4) Total coliform density shall not exceed 1,000 CFU/100 mL when the fecal coliform/total coliform ratio exceeds 0.1.

Compliance with the seven Ocean Plan standards are summarized below for the stations located in USA waters. In contrast, no such compliance summaries are presented for the three shore stations located in Mexican waters south of the International Border (i.e., S0, S2, and S3) since this region is not subject to the Ocean Plan standards.

Quality controls of bacteriological data include laboratory and field duplicate analyses. Laboratory duplicates are performed on approximately 10% of the water quality samples, while field duplicates are performed six times a month (see Appendix A). Laboratory duplicates represent two aliquots of the original sample that are split in the laboratory and analyzed by the same analyst using identical procedures within the same analytical run. The results of these analyses provide a measure of intra-analyst precision. In contrast, field duplicates represent two separate samples collected at the same time from the same site, which are handled under identical circumstances and treated exactly the same throughout field and lab procedures. The results of these analyses provide a measure of precision associated with sample collection, preservation, storage, and lab procedures. The sign test (see Gilbert, 1987²) is used to statistically compare both the results from the laboratory duplicates, as well as the results from the field duplicates. These data will be further analyzed in the City's 2020 Quality Assurance Report, which will be completed in March 2021.

SUMMARY OF RESULTS

> Shoreline Water Quality Sampling

- O Due to site access restrictions in Mexico, the South Bay shoreline sampling is typically carried out on the same day each week (i.e., Tuesday) to coordinate sampling between the Mexican and USA based stations. Seawater samples at the three shore stations located south of the USA/Mexico border (i.e., stations S0, S2 and S3) are presently collected by the Comisión Internacional de Límites y Aguas (CILA) and transported to the USIBWC for subsequent delivery to the City's Marine Microbiology Lab, while samples from the eight stations located in USA waters are sampled by City staff.
 - Due to unforeseen circumstances, shore samples collected on September 8, from S0, S2 and S3, exceeded their holding times and, thus, were not analyzed or reported on here.
- During September, six of the eight shore stations located north of the border were out of compliance with California Ocean Plan (Ocean Plan) water contact standards on one or more days as follows:
 - The single sample maximum (SSM) standard for total coliform was exceeded at station S5.

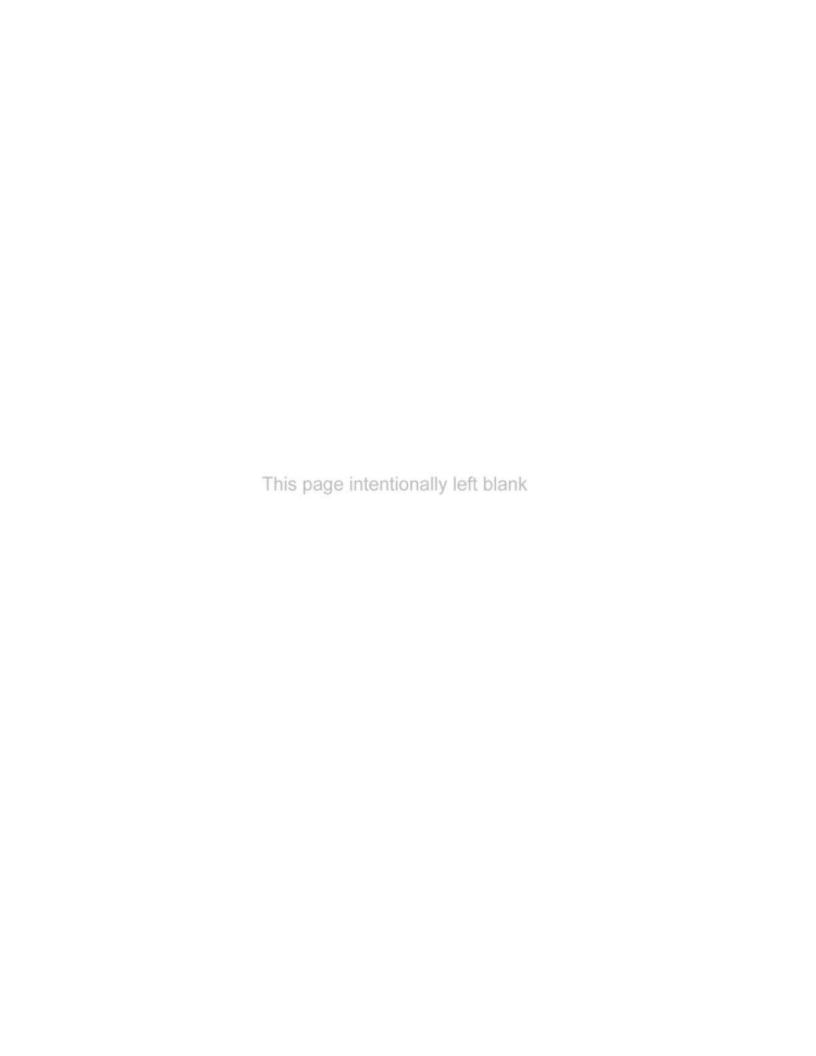
² Gilbert, R.O. (1987). Statistical Methods for Environmental Pollution Monitoring. Van Nostrand Reinhold Co., New York.

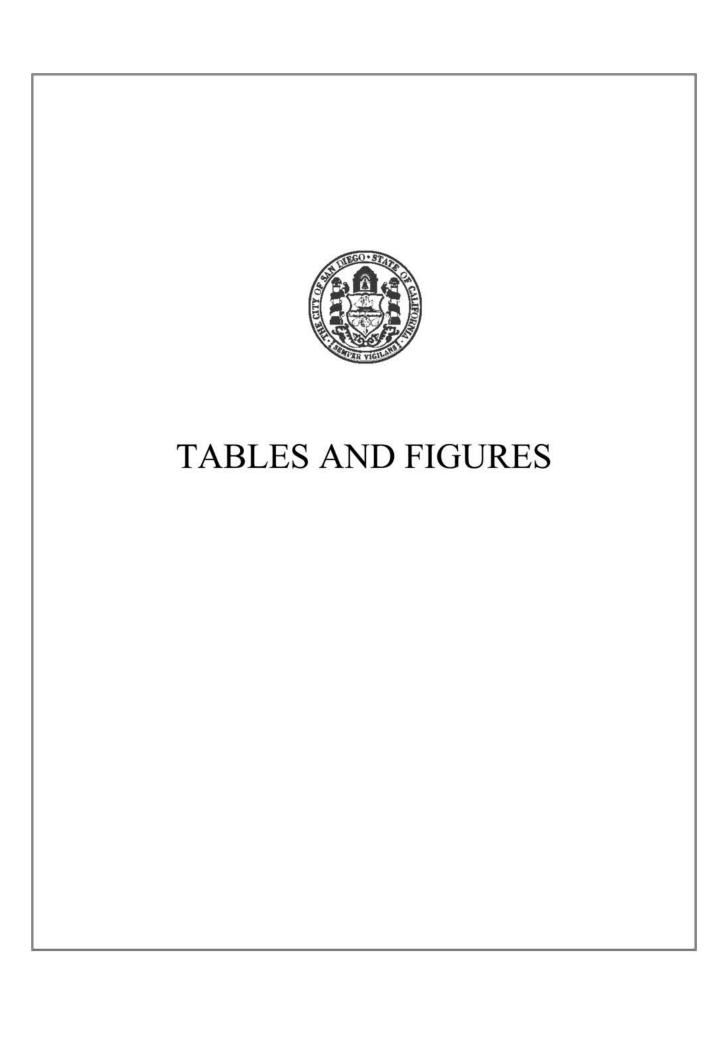
- The SSM standard for fecal coliform was exceeded at stations S4, S5, S6, S10, S11 and S12.
- The SSM standard for *Enterococcus* was exceeded at stations S4, S5, S6, S10, S11 and S12.
- The SSM standard that states total coliform densities shall not exceed 1000 CFU/100 mL when the fecal:total ratio exceeds 0.1 was exceeded at stations S4, S5, S6, S10, S11 and S12.
- Per permit requirements, resamples were collected in response to these SSM exceedances (see Table 2.8 for details).
- O Although the Ocean Plan standards do not apply to these stations, bacteria densities exceeded one or more benchmark levels (i.e., total coliforms >10,000 CFU/100mL; fecal coliforms >400 CFU/100 mL; Enterococcus >104 CFU/100 mL; total >1000 CFU/100 mL & F:T ratio >0.1) in the seawater samples collected from stations S0, S2 and S3 on one or more days during September.
- o Notable observations included a sewage-like odor at station S5, S9 and S10 on one or more days during September.
- O Historical analyses of Ocean Plan compliance rates for the South Bay outfall shore and kelp monitoring stations, combined with the results of satellite imagery data, suggest that outflows from the Tijuana River and Los Buenos Creek, as well as surface runoff during or after rain events (storms), are likely to be the cause of impacted water quality along the shore and in near shore recreational waters in the South Bay region. See the City of San Diego's most recent *Biennial Receiving Waters Monitoring and Assessment Report for the Point Loma and South Bay Ocean Outfalls* for details (https://www.sandiego.gov/public-utilities/sustainability/ocean-monitoring/reports).

➤ Kelp Bed Water Quality Sampling

- o The seven kelp bed water quality stations (I19, I24, I25, I26, I32, I39, I40) were sampled on September 8, 14, 21, and 28.
- Ocean Plan water contact standards, as follows:
 - The SSM standard for total coliform was exceeded at stations I19, I25, I26 and I40.
 - The SSM standard for fecal coliform was exceeded at stations I19, I24, I25, I26, I39 and I40.
 - The SSM standard for *Enterococcus* was exceeded at stations I19, I24, I25, I26, I39 and I40.
 - The SSM standard that states total coliform density shall not exceed 1,000 per 100 mL when the fecal coliform/total coliform ratio exceeds 0.1 was exceeded at stations I19, I24, I25, I26 and I40.
- Water column temperatures ranged from 13.64 to 20.35°C. The difference between surface and bottom waters ranged from 0.03 to 5.34°C.
- \circ Concentrations of chlorophyll *a* ranged from 0.26 to 8.68 µg/L at the kelp bed stations.
- o Nothing of sewage origin was observed at any of these kelp stations.

Offshore Water Quality Sampling
 Quarterly sampling was not conducted during September at the offshore stations. The next quarterly sampling is scheduled for November 2020.





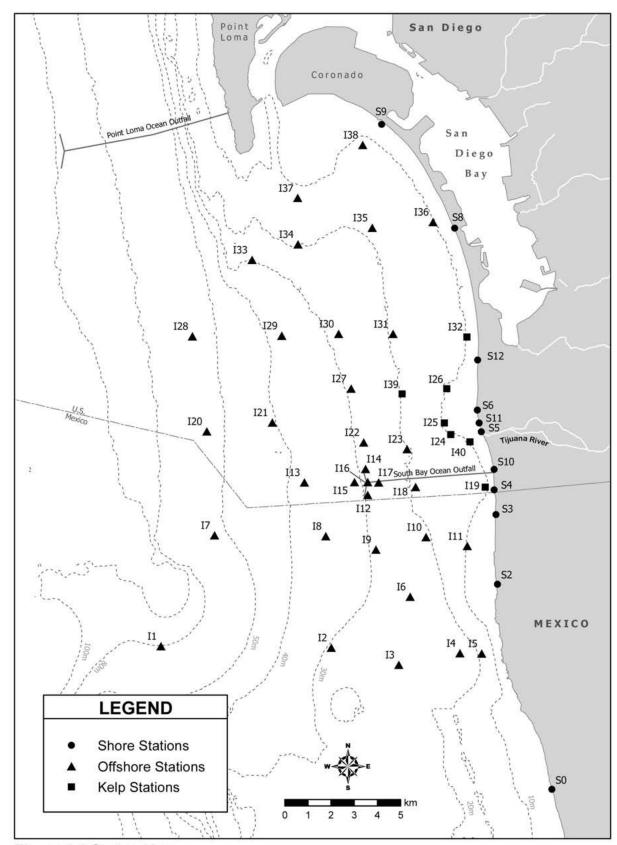
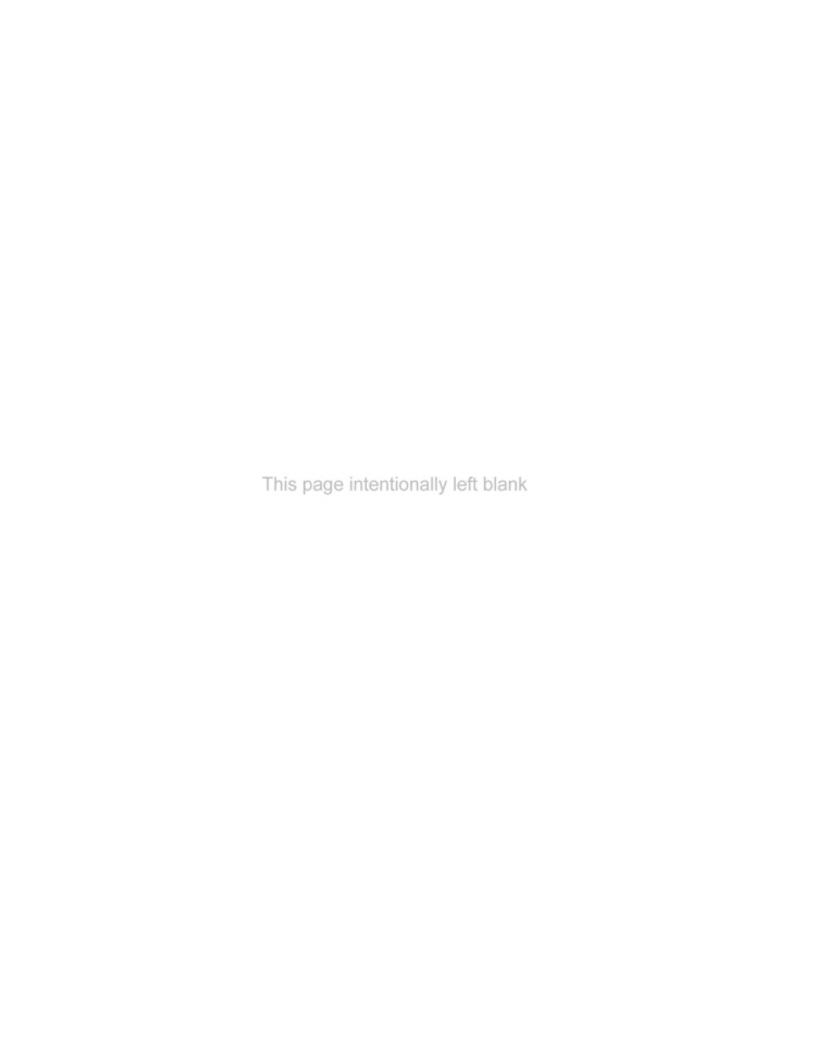


Figure 1.1 Station Map



Shore Stations	

Table 2.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >1,000 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Sep 2020	56	324	157	19	50	71	147	289
02 Sep 2020	56	324	157	19	50	71	147	289
03 Sep 2020	22	149	62	19*	63*	39	58	239
04 Sep 2020	22	149	62	19*	63*	39	58	239
05 Sep 2020	13*	127*	83*	19*	63*	16*	75*	239
06 Sep 2020	13*	127*	83*	19*	63*	16*	75*	239
07 Sep 2020	13*	127*	83*	19*	63*	16*	75*	239
08 Sep 2020	49	310	202	22	58	51	181	351
09 Sep 2020	49	310	202	22	58	51	181	351
10 Sep 2020	107	258	137	40*	134*	100	140	351
11 Sep 2020	107	258	137	40*	134*	100	140	351
12 Sep 2020	107	258	137	40*	134*	100	140	351
13 Sep 2020	107	258	137	40*	134*	100	140	351
14 Sep 2020	107	258	137	40*	134*	100	140	351
15 Sep 2020	81	168	99	35	91	76	101	233
16 Sep 2020	81	168	99	35	91	76	101	233
17 Sep 2020	93	157	51	24*	75*	100	78	122
18 Sep 2020	93	157	51	24*	75*	100	78	122
19 Sep 2020	93	157	51	24*	75*	100	78	83
20 Sep 2020	93	157	51	24*	75*	100	78	83
21 Sep 2020	93	157	51	24*	75*	100	78	83
22 Sep 2020	72	111	44	20	66	52	43	65
23 Sep 2020	72	111	44	20	66	52	43	65
24 Sep 2020	93	81	81	20*	50*	55	50	83
25 Sep 2020	93	81	81	20*	50*	55	50	83
26 Sep 2020	93	81	81	20*	50*	55	50	83
27 Sep 2020	93	81	81	20*	50*	55	50	83
28 Sep 2020	93	81	81	20*	50*	55	50	83
29 Sep 2020	72	44	64	20	42	46	43	65
30 Sep 2020	72	44	64	20	42	46	43	65

^{*} Geometric mean calculated using n<5

Table 2.2

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >200 CFU/100 mL exceed the standard.

	Date	S4	S5	S6	S8	S9	S10	S11	S12	1
3	01 Sep 2020	21	37	37	3	3	18	16	40	1
	02 Sep 2020	21	37	37	3	3	18	16	40	l
	03 Sep 2020	9	15	13	4*	2*	10	5	31	l
	04 Sep 2020	9	15	13	4*	2*	10	5	31	l
1	05 Sep 2020	9*	11*	20*	4*	2*	5*	6*	31	l
3	06 Sep 2020	9*	11*	20*	4*	2*	5*	6*	31	l
11.0	07 Sep 2020	9*	11*	20*	4*	2*	5*	6*	31	l
1 3	08 Sep 2020	26	38	53	3	4	17	21	48	l
9	09 Sep 2020	26	38	53	3	4	17	21	48	l
3	10 Sep 2020	39	43	34	4*	4*	27	25	54	l
2	11 Sep 2020	39	43	34	4*	4*	27	25	54	l
3	12 Sep 2020	39	43	34	4*	4*	27	25	54	l
1	13 Sep 2020	39	43	34	4*	4*	27	25	54	l
1	14 Sep 2020	39	43	34	4*	4*	27	25	54	l
2	15 Sep 2020	29	31	31	3	4	18	19	47	l
1	16 Sep 2020	29	31	31	3	4	18	19	47	l
8	17 Sep 2020	31	30	21	2*	4*	22	14	27	l
1	18 Sep 2020	31	30	21	2*	4*	22	14	27	l
3	19 Sep 2020	31	30	21	2*	4*	22	14	17	l
1	20 Sep 2020	31	30	21	2*	4*	22	14	17	l
18	21 Sep 2020	31	30	21	2*	4*	22	14	17	l
	22 Sep 2020	29	19	14	3	4	15	10	17	l
1	23 Sep 2020	29	19	14	3	4	15	10	17	l
1	24 Sep 2020	37	16	21	3*	4*	16	14	27	l
1	25 Sep 2020	37	16	21	3*	4*	16	14	27	l
	26 Sep 2020	37	16	21	3*	4*	16	14	27	l
	27 Sep 2020	37	16	21	3*	4*	16	14	27	l
18	28 Sep 2020	37	16	21	3*	4*	16	14	27	
1	29 Sep 2020	23	11	14	3	4	11	10	26	
3	30 Sep 2020	23	11	14	3	4	11	10	26	

^{*} Geometric mean calculated using n<5

Table 2.3

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for *Enterococcus* at the SBOO shore stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >35 CFU/100 mL exceed the standard.

Date	S4	S5	S6	S8	S9	S10	S11	S12	1
01 Sep 2020	15	24	19	2	3	8	14	10	١
02 Sep 2020	15	24	19	2	3	8	14	10	l
03 Sep 2020	7	11	8	2*	2*	4	6	8*	l
04 Sep 2020	7	11	8	2*	2*	4	6	8*	l
05 Sep 2020	7*	15*	10*	2*	2*	3*	8*	8*	l
06 Sep 2020	7*	15*	10*	2*	2*	3*	8*	8*	l
07 Sep 2020	7*	15*	10*	2*	2*	3*	8*	8*	l
08 Sep 2020	18	32	26	3	3	9	19	15	l
09 Sep 2020	18	32	26	3	3	9	19	15	l
10 Sep 2020	27	32	30	3*	3*	9	23	15	l
11 Sep 2020	27	32	30	3*	3*	9	23	15	l
12 Sep 2020	27	32	30	3*	3*	9	23	15	l
13 Sep 2020	27	32	30	3*	3*	9	23	15	l
14 Sep 2020	27	32	30	3*	3*	9	23	15	l
15 Sep 2020	33	23	30	3	3	7	30	11	l
16 Sep 2020	33	23	30	3	3	7	30	11	l
17 Sep 2020	34	25	26	4*	3*	7	30	7	l
18 Sep 2020	34	25	26	4*	3*	7	30	7	l
19 Sep 2020	34	25	26	4*	3*	7	30	7	l
20 Sep 2020	34	25	26	4*	3*	7	30	7	l
21 Sep 2020	34	25	26	4*	3*	7	30	7	l
22 Sep 2020	21	16	17	4	4	6	19	6	l
23 Sep 2020	21	16	17	4	4	6	19	6	l
24 Sep 2020	27	17	26	4*	4*	7	30	6	l
25 Sep 2020	27	17	26	4*	4*	7	30	6	l
26 Sep 2020	27	17	26	4*	4*	7	30	6	l
27 Sep 2020	27	17	26	4*	4*	7	30	6	
28 Sep 2020	27	17	26	4*	4*	7	30	6	
29 Sep 2020	17	12	19	4	4	6	24	5	
30 Sep 2020	17	12	19	4	4	6	24	5	

^{*} Geometric mean calculated using n<5

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria, which states that total coliform density shall not exceed 10,000 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
08 Sep 2020	IC	E	IC	IC	IC	IC	IC	IC
10 Sep 2020	IC	IC	IC	ns	ns	IC	IC	IC
15 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
22 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
29 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
08 Sep 2020	E	E	E	IC	IC	E	E	E
10 Sep 2020	IC	IC	IC	ns	ns	IC	IC	IC
15 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
22 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
29 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
08 Sep 2020	E	E	E	IC	IC	E	E	E
10 Sep 2020	IC	IC	IC	ns	ns	IC	IC	IC
15 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
22 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
29 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC

Summary of compliance at the SBOO shore stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T), which states that total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	S4	S5	S6	S8	S9	S10	S11	S12
01 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
08 Sep 2020	E	E	E	IC	IC	E	E	E
10 Sep 2020	IC	IC	IC	ns	ns	IC	IC	IC
15 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
22 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC
29 Sep 2020	IC	IC	IC	IC	IC	IC	IC	IC

Table 2.8Summary of water quality parameters at the SBOO shore stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL. The fecal:total coliform ratio (F:T) is unitless. Comments follow the data summary.

Station	Date	Time	Total	Fecal	Entero	F:T
S0	01 Sep 2020	1020	9000	620	320e	0.07
S0	08 Sep 2020	1045	na	na	na	na
S0	15 Sep 2020	1000	9400	560	560	0.06
S0	22 Sep 2020	950	9000	900	820	0.10
S0	29 Sep 2020	1125	1400	540	300e	0.39
S2	01 Sep 2020	945	6e	<2	2e	0.33
S2	08 Sep 2020	1005	na	na	na	na
S2	15 Sep 2020	1058	4e	2e	4e	0.50
S2	22 Sep 2020	1150	<2	<2	40	1.00
S2	29 Sep 2020	1220	1300	540	240e	0.42
62	01 Can 2020	010	~20	20	20	0.10
S3	01 Sep 2020	910	<20	2e	2e	0.10
S3	08 Sep 2020	945	na	na	na	na
S3	15 Sep 2020	1132	2e	2e	<2	1.00
S3	22 Sep 2020	1115	<20	<2	4e	0.10
S3	29 Sep 2020	1245	1000e	640	100e	0.64
S4	01 Sep 2020	757	<20	<20	6e	1.00
S4	08 Sep 2020	752	8800	1800e	880	0.20
S4	10 Sep 2020	1004	100e	16e	16e	0.16
S4	15 Sep 2020	829	<20	6e	84	0.30
S4	22 Sep 2020	805	<20	<20	<2	1.00
S4	29 Sep 2020	947	<20	<2	2e	0.10
S5	01 Sep 2020	832	<20	<2	58	0.10
S5	08 Sep 2020	846	11000	5000	800e	0.45
S5	10 Sep 2020	817	40e	8e	4e	0.20
S5	15 Sep 2020	731	<20	6e	4e	0.30
S5	22 Sep 2020	1039	<20	<2	<2	0.10
S5	29 Sep 2020	853	2e	<2	<2	1.00
S6	01 Sep 2020	848	60e	22e	46	0.37
S6			7200	2400e	980	0.37
	08 Sep 2020	902				
S6	10 Sep 2020	841	<20	2e	4e	0.10
S6	15 Sep 2020	745	20e	<20	30e	1.00
S6	22 Sep 2020	1058	<20	<2	<2	0.10
S6	29 Sep 2020	909	<20	2e	4e	0.10
S8	01 Sep 2020	942	<20	<2	2e	0.10
S8	08 Sep 2020	957	40e	2e	10e	0.05
S8	15 Sep 2020	925	<20	2e	4e	0.10
S8	22 Sep 2020	1143	10e	8e	4e	0.80
S8	29 Sep 2020	740	<20	<2	<2	0.10
S9	01 Sep 2020	1001	<200	4e	<2	0.02
S9	08 Sep 2020	1033	40e	<20	8e	0.50
S9	15 Sep 2020	945	<20	<2	<2	0.10
S9	22 Sep 2020	1214	40e	<2	12e	0.05
S9	29 Sep 2020	723	20e	<2	<2	0.10
S10	01 Sep 2020	751	<20	6e	<2	0.30
S10	08 Sep 2020	744	5200	2000e	1100	0.38
S10	10 Sep 2020	1014	120e	2000e	2e	0.17
010	10 Och 2020	1014	1200	208		0.17

Station	Date	Time	Total	Fecal	Entero	F:T
S10	15 Sep 2020	823	<20	<2	2e	0.10
S10	22 Sep 2020	818	<2	<2	2e	1.00
S10	29 Sep 2020	940	<20	<2	<2	0.10
S11	01 Sep 2020	843	<20	2e	36e	0.10
S11	08 Sep 2020	855	6200	2600e	600e	0.42
S11	10 Sep 2020	832	60e	14e	6e	0.23
S11	15 Sep 2020	739	<20	4e	100	0.20
S11	22 Sep 2020	1050	<2	<2	2e	1.00
S11	29 Sep 2020	902	<20	<2	8e	0.10
S12	01 Sep 2020	903	<200	20e	6e	0.10
S12	08 Sep 2020	920	2400e	440e	200e	0.18
S12	10 Sep 2020	915	<20	4e	<2	0.20
S12	15 Sep 2020	755	<20	20e	<2	1.00
S12	22 Sep 2020	1126	<20	20e	<2	1.00
S12	29 Sep 2020	834	<20	<20	<2	1.00

ns = not sampled na = not analyzed ND = no data

Comments

Station	Date	Depth	Parameter	Comments
S0	08 Sep 2020			Samples not received; Samples outside of holding time because of coordination between IBWC and Mexico
S2	08 Sep 2020			Samples not received; Samples outside of holding time because of coordination between IBWC and Mexico
S3	08 Sep 2020			Samples not received; Samples outside of holding time because of coordination between IBWC and Mexico
S10	10 Sep 2020			Resample
S11	10 Sep 2020			Resample
S12	10 Sep 2020			Resample
S4	10 Sep 2020			Resample
S5	10 Sep 2020			Resample
S6	10 Sep 2020			Resample

Table 2.9Summary of visual observations made during the month for each SBOO shore station by sample date.

Station	Date	Parameter	Value
S0	01 Sep 2020	Arrive Time	1020
S0	01 Sep 2020	Weather	Sunny
S0	01 Sep 2020	Wind Speed (kts)	1.5
S0	01 Sep 2020	Wind Opeed (Rts)	NE
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
S0	01 Sep 2020	Animal Life	5 Shorebirds
S0	01 Sep 2020	Floatables	None
S0	01 Sep 2020	Water Color	Green
S0	01 Sep 2020	Current Direction	N
S0	01 Sep 2020	Water Temp (C)	19
S0	01 Sep 2020	Wave Height Low (ft)	3
S0	01 Sep 2020	High Tide (ft)	4.6
S0	01 Sep 2020	High Tide Time	951
SO	01 Sep 2020	Low Tide (ft)	1.4
SO	01 Sep 2020	Low Tide Time	1524
S0	01 Sep 2020	Comments	Kelp; 1 Person; Water clear; Flow from storm drain is 1.0 L/sec
S0	08 Sep 2020	Arrive Time	1045
S0	08 Sep 2020	Weather	Cloudy
S0	08 Sep 2020	Wind Speed (kts)	6.2
			NE
S0	08 Sep 2020	Wind Dir	
S0	08 Sep 2020	Animal Life	20 Shorebirds
S0	08 Sep 2020	Floatables	None
S0	08 Sep 2020	Water Color	Grey
S0	08 Sep 2020	Current Direction	N
S0	08 Sep 2020	Water Temp (C)	19
S0	08 Sep 2020	Wave Height Low (ft)	3
SO	08 Sep 2020	High Tide (ft)	4.5
SO	08 Sep 2020	High Tide Time	1303
S0	08 Sep 2020	Low Tide (ft)	2.2
SO	08 Sep 2020	Low Tide Time	624
SO	08 Sep 2020	Comments	Kelp; Water turbid; 0.5 L/sec water flowing from storm drain
SO	15 Sep 2020	Arrive Time	1000
S0	15 Sep 2020	Weather	Sunny
S0			3.2
	15 Sep 2020	Wind Speed (kts)	
S0	15 Sep 2020	Wind Dir	NE ASSOCIATION
S0	15 Sep 2020	Animal Life	15 Shorebirds
S0	15 Sep 2020	Floatables	None
S0	15 Sep 2020	Water Color	Green
S0	15 Sep 2020	Current Direction	N
S0	15 Sep 2020	Water Temp (C)	16
S0	15 Sep 2020	Wave Height Low (ft)	3
SO	15 Sep 2020	High Tide (ft)	4.7
S0	15 Sep 2020	High Tide Time	846
SO	15 Sep 2020	Low Tide (ft)	1.3
SO	15 Sep 2020	Low Tide Time	1420
S0	15 Sep 2020	Comments	Kelp; Water turbid; 0.5 L/sec water flowing from storm drain
SO	22 Sep 2020	Arrive Time	950
S0	22 Sep 2020	Weather	Sunny
S0	22 Sep 2020	Wind Speed (kts)	3.4
S0		Wind Dir	NE
	22 Sep 2020		I TORANA AND AND AND AND AND AND AND AND AND
S0	22 Sep 2020	Animal Life	10 Shorebirds
S0	22 Sep 2020	Floatables	None
S0	22 Sep 2020	Water Color	Blue
S0	22 Sep 2020	Current Direction	N

Station	Date	Parameter	Value
S0	22 Sep 2020	Water Temp (C)	16
S0	22 Sep 2020	Wave Height Low (ft)	3
S0	22 Sep 2020	High Tide (ft)	5.4
S0	22 Sep 2020	High Tide Time	1316
S0	22 Sep 2020	Low Tide (ft)	2.1
S0	22 Sep 2020	Low Tide Time	648
S0	22 Sep 2020	Comments	Kelp; Water clear; 0.5 L/sec water flowing from storm drain
S0	29 Sep 2020	Arrive Time	1125
S0	29 Sep 2020	Weather	Sunny
S0	29 Sep 2020	Wind Speed (kts)	8.1
S0	29 Sep 2020	Wind Dir	NE
S0	29 Sep 2020	Animal Life	1 Dog
S0	29 Sep 2020	Floatables	None
S0	29 Sep 2020	Water Color	Blue
S0	29 Sep 2020	Current Direction	N
S0	29 Sep 2020	Water Temp (C)	18
S0	29 Sep 2020	Wave Height Low (ft)	3
S0	29 Sep 2020	High Tide (ft)	4.9
S0	29 Sep 2020	High Tide Time	849
S0	29 Sep 2020	Low Tide (ft)	1.2
S0	29 Sep 2020	Low Tide Time	1440
S0	29 Sep 2020	Comments	Kelp; 1 Person; Water turbid; 0.5 L/sec water flowing from
26.5665527		5 0 m 6 m 7 0 m 7 m 7 m 7 m 7 m 7 m 7 m 7 m 7 m	storm drain
S2	01 Sep 2020	Arrive Time	945
S2	01 Sep 2020	Weather	Cloudy
S2	01 Sep 2020	Wind Speed (kts)	1.1
S2	01 Sep 2020	Wind Dir	NE
S2	01 Sep 2020	Animal Life	10 Shorebirds; 1 Dog
S2	01 Sep 2020	Floatables	None
S2	01 Sep 2020	Water Color	Green
S2	01 Sep 2020	Current Direction	N
S2	01 Sep 2020	Water Temp (C)	19
S2	01 Sep 2020	Wave Height Low (ft)	3
S2	01 Sep 2020	High Tide (ft)	4.6
S2	01 Sep 2020	High Tide Time	951
S2	01 Sep 2020	Low Tide (ft)	1.4
S2	01 Sep 2020	Low Tide Time	1524
S2	01 Sep 2020	Comments	Kelp; 10 Persons; Water clear; No flow from storm drain
S2	08 Sep 2020	Arrive Time	1005
S2	08 Sep 2020	Weather	Cloudy
S2	08 Sep 2020	Wind Speed (kts)	2.4
S2	08 Sep 2020	Wind Dir	NE
S2	08 Sep 2020	Animal Life	20 Shorebirds; 2 Dogs
S2	08 Sep 2020	Floatables	None
S2	08 Sep 2020	Water Color	Grey
S2	08 Sep 2020	Current Direction	N
S2	08 Sep 2020	Water Temp (C)	19
S2	08 Sep 2020	Wave Height Low (ft)	3
S2	08 Sep 2020	High Tide (ft)	4.5
S2	08 Sep 2020	High Tide Time	1303
S2	08 Sep 2020	Low Tide (ft)	2.2
S2	08 Sep 2020	Low Tide Time	624
S2	08 Sep 2020	Comments	Kelp; Water turbid; No flow from storm drain
S2	15 Sep 2020	Arrive Time	1058
S2	15 Sep 2020	Weather	Sunny
S2	15 Sep 2020	Wind Speed (kts)	3.3
S2	15 Sep 2020	Wind Dir	NE

Station	Date	Parameter	Value
S2	15 Sep 2020	Animal Life	20 Shorebirds
S2	15 Sep 2020	Floatables	None
S2	15 Sep 2020	Water Color	Green
S2	15 Sep 2020	Current Direction	N
S2	15 Sep 2020	Water Temp (C)	16
S2	15 Sep 2020	Wave Height Low (ft)	3
S2	15 Sep 2020	High Tide (ft)	4.7
S2	15 Sep 2020	High Tide Time	846
S2	15 Sep 2020	Low Tide (ft)	1.3
S2	15 Sep 2020	Low Tide Time	1420
S2	15 Sep 2020	Comments	Kelp; 2 Persons; Water turbid; No flow from storm drain
S2	22 Sep 2020	Arrive Time	1150
S2	22 Sep 2020	Weather	Sunny
S2	22 Sep 2020	Wind Speed (kts)	1.3
S2	22 Sep 2020	Wind Dir	NE
S2	22 Sep 2020	Animal Life	10 Shorebirds; 4 Dogs
S2	22 Sep 2020	Floatables	None
S2	22 Sep 2020	Water Color	Blue
S2	22 Sep 2020	Current Direction	N
S2	22 Sep 2020	Water Temp (C)	16
S2	22 Sep 2020	Wave Height Low (ft)	3
S2			5.4
	22 Sep 2020	High Tide (ft)	7833V3
S2	22 Sep 2020	High Tide Time	1316
S2	22 Sep 2020	Low Tide (ft)	2.1
S2	22 Sep 2020	Low Tide Time	648
S2	22 Sep 2020	Comments	Kelp; 4 Persons; Water clear; No flow from storm drain
S2	29 Sep 2020	Arrive Time	1220
S2	29 Sep 2020	Weather	Sunny
S2	29 Sep 2020	Wind Speed (kts)	7.2
S2	29 Sep 2020	Wind Dir	NE
S2	29 Sep 2020	Animal Life	2 Dogs
S2	29 Sep 2020	Floatables	None
S2	29 Sep 2020	Water Color	Blue
S2	29 Sep 2020	Current Direction	N
	5.510		
S2	29 Sep 2020	Water Temp (C)	18
S2	29 Sep 2020	Wave Height Low (ft)	3
S2	29 Sep 2020	High Tide (ft)	4.9
S2	29 Sep 2020	High Tide Time	849
S2	29 Sep 2020	Low Tide (ft)	1.2
S2	29 Sep 2020	Low Tide Time	1440
S2	29 Sep 2020	Comments	5 Persons; Water clear; No flow from storm drain
S3	01 Sep 2020	Arrive Time	910
S3	01 Sep 2020	Weather	Cloudy
S3	01 Sep 2020	Wind Speed (kts)	1
S3	01 Sep 2020	Wind Dir	NE
S3	01 Sep 2020	Animal Life	5 Shorebirds; 3 Dogs
S3	01 Sep 2020	Floatables	None
S3	01 Sep 2020	Water Color	Green
S3	01 Sep 2020	Current Direction	N
S3	01 Sep 2020	Water Temp (C)	19
S3	01 Sep 2020	Wave Height Low (ft)	3
S3	01 Sep 2020	High Tide (ft)	4.6
S3	01 Sep 2020	High Tide Time	951
S3	01 Sep 2020	Low Tide (ft)	-0.4
S3	01 Sep 2020	Low Tide Time	342
S3	01 Sep 2020	Comments	Kelp; 10 Persons; Water clear; Flow from storm drain is 0.5 L/sec

Station	Date	Parameter	Value
S3	08 Sep 2020	Arrive Time	945
S3	08 Sep 2020	Weather	Cloudy
S3	08 Sep 2020	Wind Speed (kts)	1.7
S3	08 Sep 2020	Wind Dir	NE
S3	08 Sep 2020	Animal Life	20 Shorebirds; 3 Dogs
S3	08 Sep 2020	Floatables	None
S3	08 Sep 2020	Water Color	Grey
S3	08 Sep 2020	Current Direction	N N
S3			19
	08 Sep 2020	Water Temp (C)	
S3	08 Sep 2020	Wave Height Low (ft)	3
S3	08 Sep 2020	High Tide (ft)	4.5
S3	08 Sep 2020	High Tide Time	1303
S3	08 Sep 2020	Low Tide (ft)	2.2
S3	08 Sep 2020	Low Tide Time	624
S3	08 Sep 2020	Comments	Kelp; Water turbid; No flow from storm drain
S3	15 Sep 2020	Arrive Time	1132
S3	15 Sep 2020	Weather	Sunny
S3	15 Sep 2020	Wind Speed (kts)	3.4
S3	15 Sep 2020	Wind Dir	NE
S3	15 Sep 2020	Animal Life	20 Shorebirds
S3	15 Sep 2020	Floatables	None
		The state of the s	
S3	15 Sep 2020	Water Color	Green
S3	15 Sep 2020	Current Direction	N
S3	15 Sep 2020	Water Temp (C)	16
S3	15 Sep 2020	Wave Height Low (ft)	3
S3	15 Sep 2020	High Tide (ft)	4.7
S3	15 Sep 2020	High Tide Time	846
S3	15 Sep 2020	Low Tide (ft)	1.3
S3	15 Sep 2020	Low Tide Time	1420
S3	15 Sep 2020	Comments	Kelp; Water turbid; No flow from storm drain
S3	22 Sep 2020	Arrive Time	1115
S3	22 Sep 2020	Weather	Sunny
S3	22 Sep 2020	Wind Speed (kts)	1.5
S3	22 Sep 2020	Wind Dir	NE
	320		
S3	22 Sep 2020	Animal Life	5 Shorebirds
S3	22 Sep 2020	Floatables	None
S3	22 Sep 2020	Water Color	Blue
S3	22 Sep 2020	Current Direction	N
S3	22 Sep 2020	Water Temp (C)	16
S3	22 Sep 2020	Wave Height Low (ft)	3
S3	22 Sep 2020	High Tide (ft)	5.4
S3	22 Sep 2020	High Tide Time	1316
S3	22 Sep 2020	Low Tide (ft)	2.1
S3	22 Sep 2020	Low Tide Time	648
S3	22 Sep 2020	Comments	Kelp; Water clear; 0.5 L/sec water flowing from storm drain
S3	20 Sep 2020	Arrive Time	1245
	29 Sep 2020		
S3	29 Sep 2020	Weather	Sunny
S3	29 Sep 2020	Wind Speed (kts)	7.6
S3	29 Sep 2020	Wind Dir	NE
S3	29 Sep 2020	Animal Life	1 Dog
S3	29 Sep 2020	Floatables	None
S3	29 Sep 2020	Water Color	Blue
S3	29 Sep 2020	Current Direction	N
S3	29 Sep 2020	Water Temp (C)	18
S3	29 Sep 2020	Wave Height Low (ft)	3
S3	29 Sep 2020	High Tide (ft)	4.9
S3	29 Sep 2020	High Tide Time	849
S3	29 Sep 2020	Low Tide (ft)	1.2
33	29 Jeh 2020	LOW TIDE (IL)	1.6

Station	Date	Parameter	Value
S3	29 Sep 2020	Low Tide Time	1440
S3	29 Sep 2020	Comments	Kelp; Water clear; No flow from storm drain
S4	01 Sep 2020	Arrive Time	757
S4	01 Sep 2020	Weather	Cloudy
S4	01 Sep 2020	Wind Speed (kts)	1.9
S4	01 Sep 2020	Wind Dir	W
S4	01 Sep 2020	Animal Life	42 Godwits; 2 Plovers
		Floatables	
S4	01 Sep 2020		None
S4	01 Sep 2020	Water Color	Green
S4	01 Sep 2020	Current Direction	S
S4	01 Sep 2020	Water Temp (C)	20.1
S4	01 Sep 2020	Wave Height Low (ft)	1
S4	01 Sep 2020	High Tide (ft)	4.6
S4	01 Sep 2020	High Tide Time	951
S4	01 Sep 2020	Low Tide (ft)	-0.4
S4	01 Sep 2020	Low Tide Time	342
S4	01 Sep 2020	Comments	Kelp; Seagrass; Water clear
S4	08 Sep 2020	Arrive Time	752
S4	08 Sep 2020	Weather	Drizzle
S4	08 Sep 2020	Wind Speed (kts)	1.7
S4	08 Sep 2020	Wind Dir	W
S4	08 Sep 2020	Animal Life	17 Godwits; 5 Seals; 1 Tern
S4	08 Sep 2020	Floatables	None
S4	08 Sep 2020	Water Color	Grey
S4	08 Sep 2020	Current Direction	N
S4			20.9
	08 Sep 2020	Water Temp (C)	Care (C.A.)
S4	08 Sep 2020	Wave Height Low (ft)	2
S4	08 Sep 2020	High Tide (ft)	4.5
S4	08 Sep 2020	High Tide Time	1303
S4	08 Sep 2020	Low Tide (ft)	2.2
S4	08 Sep 2020	Low Tide Time	624
S4	08 Sep 2020	Comments	Kelp; Seagrass; Water clear; Trash-1
S4	10 Sep 2020	Arrive Time	1004
S4	10 Sep 2020	Weather	Hazy
S4	10 Sep 2020	Wind Speed (kts)	4.8
S4	10 Sep 2020	Wind Dir	NW
S4	10 Sep 2020	Animal Life	70 Godwits; 6 Plovers; 2 Terns
S4	10 Sep 2020	Floatables	None
S4	10 Sep 2020	Water Color	Green
S4	10 Sep 2020	Current Direction	S
S4	10 Sep 2020	Water Temp (C)	22.3
S4	10 Sep 2020	Wave Height Low (ft)	2
S4	10 Sep 2020	High Tide (ft)	4.4
			1 - 100 Control
S4	10 Sep 2020	High Tide Time	1526
S4	10 Sep 2020	Low Tide (ft)	1.5
S4	10 Sep 2020	Low Tide Time	2218
S4	10 Sep 2020	Comments	Resample; Kelp; Seagrass; Debris; Water clear; Debris 1
S4	15 Sep 2020	Arrive Time	829
S4	15 Sep 2020	Weather	Hazy
S4	15 Sep 2020	Wind Speed (kts)	4.4
S4	15 Sep 2020	Wind Dir	E
S4	15 Sep 2020	Animal Life	100 Godwits; 20 Seagulls
S4	15 Sep 2020	Floatables	None
S4	15 Sep 2020	Water Color	Green
S4	15 Sep 2020	Current Direction	S
S4	15 Sep 2020	Water Temp (C)	18.9
	500 2020	Wave Height Low (ft)	3

Station	Date	Parameter	Value
S4	15 Sep 2020	High Tide (ft)	4.7
S4	15 Sep 2020	High Tide Time	846
S4	15 Sep 2020	Low Tide (ft)	-0.6
S4	15 Sep 2020	Low Tide Time	232
S4	15 Sep 2020	Comments	Kelp; Seagrass; Debris; Water clear; Debris1
S4	22 Sep 2020	Arrive Time	805
S4	22 Sep 2020	Weather	Cloudy
S4		200.027974040703	
	22 Sep 2020	Wind Speed (kts)	4.6
S4	22 Sep 2020	Wind Dir	N
S4	22 Sep 2020	Animal Life	35 Godwits; 2 Pelicans; 45 Seagulls; 37 Terns
S4	22 Sep 2020	Floatables	None
S4	22 Sep 2020	Water Color	Green
S4	22 Sep 2020	Current Direction	S
S4	22 Sep 2020	Water Temp (C)	19.6
S4	22 Sep 2020	Wave Height Low (ft)	2
S4	22 Sep 2020	High Tide (ft)	5.4
S4	22 Sep 2020	High Tide Time	1316
S4	22 Sep 2020	Low Tide (ft)	2.1
S4	22 Sep 2020	Low Tide Time	648
S4	22 Sep 2020	Comments	Kelp; Seagrass; Water clear
S4	29 Sep 2020	Arrive Time	947
S4	29 Sep 2020	Weather	Sunny
S4	29 Sep 2020	Wind Speed (kts)	5
S4	29 Sep 2020	Wind Dir	N
S4	29 Sep 2020	Animal Life	6 Plovers; 50 Seagulls
S4	29 Sep 2020	Floatables	Foam; Film
S4	29 Sep 2020	Water Color	Green
S4	29 Sep 2020	Current Direction	S
S4		The state of the second of the	19.7
S4	29 Sep 2020	Water Temp (C)	4
	29 Sep 2020	Wave Height Low (ft)	
S4	29 Sep 2020	High Tide (ft)	4.9
S4	29 Sep 2020	High Tide Time	849
S4	29 Sep 2020	Low Tide (ft)	1.2
S4	29 Sep 2020	Low Tide Time	1440
S4	29 Sep 2020	Comments	Kelp; Seagrass; Water clear
S5	01 Sep 2020	Arrive Time	832
S5	01 Sep 2020	Weather	Cloudy
S5	01 Sep 2020	Wind Speed (kts)	3.1
S5	01 Sep 2020	Wind Dir	W
S5	01 Sep 2020	Animal Life	2 Cormorants; 5 Dolphins; 12 Pelicans; 15 Seagulls
S5	01 Sep 2020	Floatables	None
S5	01 Sep 2020	Water Color	Green
S5	01 Sep 2020	Current Direction	S
S5	01 Sep 2020	Water Temp (C)	19.3
S5	01 Sep 2020	Wave Height Low (ft)	2
S5	01 Sep 2020	High Tide (ft)	4.6
S5	01 Sep 2020	High Tide Time	951
S5	01 Sep 2020	Low Tide (ft)	-0.4
S5	01 Sep 2020	Low Tide Time	342
S5	01 Sep 2020	Comments	Kelp; Seagrass; Algae; 1 Person; Water clear
S5	08 Sep 2020	Arrive Time	846
S5	08 Sep 2020	Weather	Cloudy
S5			
	08 Sep 2020	Wind Speed (kts)	2.1 SW
S5	08 Sep 2020	Wind Dir	1.707333.00
S5	08 Sep 2020	Animal Life	1 Seagull; 2 Terns
S5	08 Sep 2020	Floatables	None
S5	08 Sep 2020	Water Color	Grey

Station	Date	Parameter	Value
S5	08 Sep 2020	Current Direction	N
S5	08 Sep 2020	Water Temp (C)	20.7
S5	08 Sep 2020	Wave Height Low (ft)	1
S5	08 Sep 2020	High Tide (ft)	4.5
S5	08 Sep 2020	High Tide Time	1303
S5	08 Sep 2020	Low Tide (ft)	2.2
S5	08 Sep 2020	Low Tide Time	624
S5	08 Sep 2020	Comments	Kelp; Seagrass; Sewage-like odor; 4 Persons; Water clear; Trash-1
S5	10 Sep 2020	Arrive Time	817
S5	10 Sep 2020	Weather	Hazy
S5	10 Sep 2020	Wind Speed (kts)	0
S5	10 Sep 2020	Wind Dir	
S5	10 Sep 2020	Animal Life	2 Godwits; 1 Pelican; 1 Seagull
S5	10 Sep 2020	Floatables	None
S5	10 Sep 2020	Water Color	Green
S5	10 Sep 2020	Current Direction	S
S5	10 Sep 2020	Water Temp (C)	20.8
S5	10 Sep 2020	Wave Height Low (ft)	3
S5	10 Sep 2020	High Tide (ft)	4.4
S5	10 Sep 2020	High Tide Time	1526
S5	10 Sep 2020	Low Tide (ft)	1.5
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
S5	10 Sep 2020	Low Tide Time	2218
S5	10 Sep 2020	Comments	Resample; Kelp; Seagrass; Algae; 2 Persons; Water clear
S5	15 Sep 2020	Arrive Time	731
S5	15 Sep 2020	Weather	Hazy
S5	15 Sep 2020	Wind Speed (kts)	2.1
S5	15 Sep 2020	Wind Dir	E
S5	15 Sep 2020	Animal Life	1 Dog; 4 Pelicans; 4 Plovers
S5			None
	15 Sep 2020	Floatables	
S5	15 Sep 2020	Water Color	Green
S5	15 Sep 2020	Current Direction	S
S5	15 Sep 2020	Water Temp (C)	17.8
S5	15 Sep 2020	Wave Height Low (ft)	1
S5	15 Sep 2020	High Tide (ft)	4.7
S5	15 Sep 2020	High Tide Time	846
S5	15 Sep 2020	Low Tide (ft)	-0.6
			200000
S5	15 Sep 2020	Low Tide Time	232
S5	15 Sep 2020	Comments	Kelp; Seagrass; Algae; Debris; 1 Person; Water clear; Debris 2
S5	22 Sep 2020	Arrive Time	1039
S5	22 Sep 2020	Weather	Sunny
			1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
S5	22 Sep 2020	Wind Speed (kts)	4.8
S5	22 Sep 2020	Wind Dir	N
S5	22 Sep 2020	Animal Life	None
S5	22 Sep 2020	Floatables	Foam; Film
S5	22 Sep 2020	Water Color	Brown
S5	22 Sep 2020	Current Direction	S
S5	22 Sep 2020	Water Temp (C)	21.1
S5	22 Sep 2020	Wave Height Low (ft)	3
S5	22 Sep 2020	High Tide (ft)	5.4
S5	22 Sep 2020	High Tide Time	1316
S5	22 Sep 2020	Low Tide (ft)	2.1
S5	22 Sep 2020	Low Tide Time	648
S5	22 Sep 2020	Comments	Kelp; Seagrass; Water clear
S5	29 Sep 2020	Arrive Time	853
8100 NE 15	29 Sep 2020	Weather	Sunny

Station	Date	Parameter	Value
S5	29 Sep 2020	Wind Speed (kts)	5.2
S5	29 Sep 2020	Wind Dir	N
S5	29 Sep 2020	Animal Life	2 Dogs; 4 Pelicans; 20 Terns
S5	29 Sep 2020	Floatables	Foam
S5	29 Sep 2020	Water Color	Green
S5	29 Sep 2020	Current Direction	S
S5	29 Sep 2020	Water Temp (C)	21.6
S5	29 Sep 2020	Wave Height Low (ft)	4
S5	29 Sep 2020	High Tide (ft)	4.9
S5	29 Sep 2020	High Tide (it)	849
S5	29 Sep 2020	Low Tide (ft)	1.2
S5	29 Sep 2020	Low Tide Time	1440
S5	29 Sep 2020	Comments	Kelp; Seagrass; 6 Persons; Water clear; 1 Jet ski
S6	01 Sep 2020	Arrive Time	848
S6	01 Sep 2020	Weather	Cloudy
S6	01 Sep 2020	Wind Speed (kts)	3.6
S6	01 Sep 2020	Wind Dir	W
S6	01 Sep 2020	Animal Life	2 Dogs; 2 Dolphins; 3 Godwits; 2 Pelicans
S6	01 Sep 2020	Floatables	None
S6	01 Sep 2020	Water Color	Green
S6	01 Sep 2020	Current Direction	S
S6	01 Sep 2020	Water Temp (C)	20.2
	01 Sep 2020	Wave Height Low (ft)	(Contractor)
S6			2
S6	01 Sep 2020	High Tide (ft)	4.6
S6	01 Sep 2020	High Tide Time	951
S6	01 Sep 2020	Low Tide (ft)	-0.4
S6	01 Sep 2020	Low Tide Time	342
S6	01 Sep 2020	Comments	Kelp; Seagrass; Algae; Debris; 2 Persons; 3 Surfers; Water clear; Debris 1
S6	08 Sep 2020	Arrive Time	902
S6	08 Sep 2020	Weather	Cloudy
S6	08 Sep 2020	Wind Speed (kts)	3.1
S6	08 Sep 2020	Wind Dir	SW
S6	08 Sep 2020	Animal Life	2 Godwits; 2 Terns
S6	08 Sep 2020	Floatables	None
		[[13 (4 (14) 1 (3) 1 (1 (14) 1 (14)	
S6	08 Sep 2020	Water Color	Grey
S6	08 Sep 2020	Current Direction	N oo o
S6	08 Sep 2020	Water Temp (C)	20.6
S6	08 Sep 2020	Wave Height Low (ft)	3
S6	08 Sep 2020	High Tide (ft)	4.5
S6	08 Sep 2020	High Tide Time	1303
S6	08 Sep 2020	Low Tide (ft)	2.2
S6	08 Sep 2020	Low Tide Time	624
S6	08 Sep 2020	Comments	Kelp; Seagrass; 1 Person; 6 Surfers; Water turbid
S6	10 Sep 2020	Arrive Time	841
S6	10 Sep 2020	Weather	Hazy
S6	10 Sep 2020	Wind Speed (kts)	1.7
S6	10 Sep 2020	Wind Dir	NW
S6	10 Sep 2020	Animal Life	None
S6	10 Sep 2020	Floatables	None
S6	10 Sep 2020	Water Color	Green
S6	10 Sep 2020	Current Direction	S
S6	10 Sep 2020	Water Temp (C)	21.5
S6	10 Sep 2020	Wave Height Low (ft)	2
S6	10 Sep 2020	High Tide (ft)	4.4
S6	10 Sep 2020	High Tide Time	1526
S6	10 Sep 2020	Low Tide (ft)	1.5
			119

Station	Date	Parameter	Value
S6	10 Sep 2020	Comments	Resample; Kelp; Seagrass; 1 Jogger; 2 Persons; 12 Surfers;
	Mark Stoken Marketon		Water clear
00	45.0 0000		
S6	15 Sep 2020	Arrive Time	745
S6	15 Sep 2020	Weather	Hazy
S6	15 Sep 2020	Wind Speed (kts)	1.7
S6	15 Sep 2020	Wind Dir	NE NE
S6	15 Sep 2020	Animal Life	1 Dog
S6	15 Sep 2020	Floatables	Foam
S6	15 Sep 2020	Water Color	Green
S6	15 Sep 2020	Current Direction	S
S6	15 Sep 2020	Water Temp (C)	18.8
S6	15 Sep 2020	Wave Height Low (ft)	3
S6	15 Sep 2020	High Tide (ft)	4.7
S6	15 Sep 2020	High Tide Time	846
S6	15 Sep 2020	Low Tide (ft)	-0.6
S6	15 Sep 2020		232
	C 1070 b	Low Tide Time	
S6	15 Sep 2020	Comments	Kelp; Seagrass; Algae; 5 Persons; Water clear
S6	22 Sep 2020	Arrive Time	1058
S6	22 Sep 2020	Weather	Sunny
S6	22 Sep 2020	Wind Speed (kts)	7.1
S6	22 Sep 2020	Wind Dir	NW
S6	22 Sep 2020	Animal Life	None
S6	22 Sep 2020	Floatables	Foam; Film
S6	22 Sep 2020	Water Color	Green
S6	22 Sep 2020	Current Direction	S
S6	22 Sep 2020	Water Temp (C)	21.9
S6	22 Sep 2020	Wave Height Low (ft)	2
S6	22 Sep 2020	High Tide (ft)	5.4
S6	22 Sep 2020	High Tide Time	1316
S6	22 Sep 2020	Low Tide (ft)	2.1
S6	22 Sep 2020	Low Tide Time	648
S6	22 Sep 2020	Comments	Kelp; Seagrass; Algae; 3 Persons; 3 Surfers; Water turbid
S6	29 Sep 2020	Arrive Time	909
S6		Weather	
	29 Sep 2020	\$16.00 million 10.00 million 40.	Sunny
S6	29 Sep 2020	Wind Speed (kts)	4
S6	29 Sep 2020	Wind Dir	N_
S6	29 Sep 2020	Animal Life	2 Dogs
S6	29 Sep 2020	Floatables	None
S6	29 Sep 2020	Water Color	Green
S6	29 Sep 2020	Current Direction	S
S6	29 Sep 2020	Water Temp (C)	21.1
S6	29 Sep 2020	Wave Height Low (ft)	3
S6	29 Sep 2020	High Tide (ft)	4.9
S6	29 Sep 2020	High Tide Time	849
S6	29 Sep 2020	Low Tide (ft)	1.2
S6	29 Sep 2020	Low Tide Time	1440
S6	29 Sep 2020	Comments	Kelp; Seagrass; 1 Jogger; 8 Persons; 7 Surfers; Water clear
N 5786 TV /		PRODUCTION	
S8	01 Sep 2020	Arrive Time	942
S8	01 Sep 2020	Weather	Partly Cloudy
S8	01 Sep 2020	Wind Speed (kts)	4.6
S8	01 Sep 2020	Wind Dir	W
S8	01 Sep 2020	Animal Life	None
S8	01 Sep 2020	Floatables	Foam
S8	01 Sep 2020	Water Color	Green
S8	01 Sep 2020	Current Direction	S
S8	01 Sep 2020	Water Temp (C)	21.6
7 (2) (3)	01 Sep 2020	Wave Height Low (ft)	1

Station	Date	Parameter	Value
S8	01 Sep 2020	High Tide (ft)	4.6
S8	01 Sep 2020	High Tide Time	951
S8	01 Sep 2020	Low Tide (ft)	1.4
S8	01 Sep 2020	Low Tide Time	1524
S8	01 Sep 2020	Comments	Kelp; Seagrass; 5 Persons; 1 Fisherman; Water clear
2228		5 5 55	
S8	08 Sep 2020	Arrive Time	957
S8	08 Sep 2020	Weather	Cloudy
S8	08 Sep 2020	Wind Speed (kts)	2.1
S8	08 Sep 2020	Wind Dir	W
S8	08 Sep 2020	Animal Life	3 Godwits; 1 Grebe; 2 Seagulls; 4 Terns
S8	08 Sep 2020	Floatables	None
S8	08 Sep 2020	Water Color	Green
S8	08 Sep 2020	Current Direction	N
S8	08 Sep 2020	Water Temp (C)	22.3
S8	08 Sep 2020	Wave Height Low (ft)	1
S8	08 Sep 2020	High Tide (ft)	4.5
S8	08 Sep 2020	High Tide Time	1303
S8	08 Sep 2020	Low Tide (ft)	2.2
S8	08 Sep 2020	Low Tide (it)	624
S8			
30	08 Sep 2020	Comments	Kelp; Seagrass; 9 Persons; Water clear
S8	15 Sep 2020	Arrive Time	925
S8	15 Sep 2020	Weather	Hazy
S8	15 Sep 2020	Wind Speed (kts)	1.1
S8	15 Sep 2020	Wind Dir	Ē
S8	15 Sep 2020	Animal Life	136 Plovers; 2 Seagulls
S8	15 Sep 2020	Floatables	None
S8	15 Sep 2020	Water Color	Green
S8		Current Direction	S
100000000	15 Sep 2020	The state of the s	2870 cm - cm
S8	15 Sep 2020	Water Temp (C)	22.1
S8	15 Sep 2020	Wave Height Low (ft)	2
S8	15 Sep 2020	High Tide (ft)	4.7
S8	15 Sep 2020	High Tide Time	846
S8	15 Sep 2020	Low Tide (ft)	1.3
S8	15 Sep 2020	Low Tide Time	1420
S8	15 Sep 2020	Comments	Kelp; Seagrass; 4 Persons; Water clear
S8	22 Sep 2020	Arrive Time	1143
S8	22 Sep 2020	Weather	Sunny
S8	22 Sep 2020	Wind Speed (kts)	6.2
S8	22 Sep 2020	Wind Dir	W
S8	22 Sep 2020	Animal Life	55 Seagulls
S8	22 Sep 2020	Floatables	Foam; Film
S8	22 Sep 2020		
		Water Color	Brown
S8	22 Sep 2020	Current Direction	S
S8	22 Sep 2020	Water Temp (C)	21.2
S8	22 Sep 2020	Wave Height Low (ft)	2
S8	22 Sep 2020	High Tide (ft)	5.4
S8	22 Sep 2020	High Tide Time	1316
S8	22 Sep 2020	Low Tide (ft)	2.1
S8	22 Sep 2020	Low Tide Time	648
S8	22 Sep 2020	Comments	Kelp; Seagrass; 2 Persons; 1 Swimmer; Water turbid
S8	29 Sep 2020	Arrive Time	740
S8	29 Sep 2020	Weather	Foggy
S8	29 Sep 2020	Wind Speed (kts)	1.1
S8	29 Sep 2020	Wind Opeed (Rts)	E
S8	29 Sep 2020	Animal Life	1 Godwit; 60 Plovers; 3 Seagulls
		Floatables	Foam
S8	29 Sep 2020	[[[[[[[[[[[[[[[[[[[
S8	29 Sep 2020	Water Color	Green

Station	Date	Parameter	Value
S8	29 Sep 2020	Current Direction	S
S8	29 Sep 2020	Water Temp (C)	20.4
S8	29 Sep 2020	Wave Height Low (ft)	1
S8	29 Sep 2020	High Tide (ft)	4.9
S8	29 Sep 2020	High Tide Time	849
S8	29 Sep 2020	Low Tide (ft)	0
S8			239
	29 Sep 2020	Low Tide Time	MANUAL AND CONTRACT SANCTOR OF PROPERTY OF THE
S8	29 Sep 2020	Comments	Kelp; Seagrass; 5 Persons; 1 Fisherman; Water clear
S9	01 Sep 2020	Arrive Time	1001
S9	01 Sep 2020	Weather	Partly Cloudy
S9	01 Sep 2020	Wind Speed (kts)	5.4
S9	01 Sep 2020	Wind Dir	N
S9	01 Sep 2020	Animal Life	None
S9	01 Sep 2020	Floatables	Foam
S9	01 Sep 2020	Water Color	Brown
S9	01 Sep 2020	Current Direction	S
S9	01 Sep 2020	Water Temp (C)	22
S9	01 Sep 2020	Wave Height Low (ft)	1
S9	01 Sep 2020	High Tide (ft)	4.6
S9	01 Sep 2020	High Tide Time	951
S9	01 Sep 2020	Low Tide (ft)	1.4
S9	01 Sep 2020	Low Tide Time	1524
S9	01 Sep 2020	Comments	Kelp; Seagrass; Algae; 3 Persons; Water turbid
S9	08 Sep 2020	Arrive Time	1033
S9	08 Sep 2020	Weather	Cloudy
S9	08 Sep 2020	Wind Speed (kts)	3.1
S9	08 Sep 2020	Wind Dir	SW
S9		Animal Life	[^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^
	08 Sep 2020	The State of State State of St	1 Shorebird; 2 Pelicans; 1 Seagull; 8 Terns
S9	08 Sep 2020	Floatables	None
S9	08 Sep 2020	Water Color	Green
S9	08 Sep 2020	Current Direction	N
S9	08 Sep 2020	Water Temp (C)	21.8
S9	08 Sep 2020	Wave Height Low (ft)	1
S9	08 Sep 2020	High Tide (ft)	4.5
S9	08 Sep 2020	High Tide Time	1303
S9	08 Sep 2020	Low Tide (ft)	2.2
S9	08 Sep 2020	Low Tide Time	624
S9	08 Sep 2020	Comments	Kelp; Seagrass; 2 Joggers; 5 Persons; 1 Tractor; Water turbid
S9	15 Sep 2020	Arrive Time	945
S9	15 Sep 2020	Weather	Hazy
S9			
	15 Sep 2020	Wind Speed (kts)	1.7
S9	15 Sep 2020	Wind Dir	W
S9	15 Sep 2020	Animal Life	None
S9	15 Sep 2020	Floatables	None
S9	15 Sep 2020	Water Color	Brown
S9	15 Sep 2020	Current Direction	S
S9	15 Sep 2020	Water Temp (C)	22.2
S9	15 Sep 2020	Wave Height Low (ft)	1
S9	15 Sep 2020	High Tide (ft)	4.7
S9	15 Sep 2020	High Tide Time	846
S9	15 Sep 2020	Low Tide (ft)	1.3
S9	15 Sep 2020	Low Tide Time	1420
S9	15 Sep 2020 15 Sep 2020	Comments	Kelp; Seagrass; 1 Jogger; 2 Persons; Water turbid
S9	22 Sep 2020	Arrive Time	1214
S9	22 Sep 2020	Weather	Sunny
S9	22 Sep 2020 22 Sep 2020	Wind Speed (kts)	5.6
S9	22 Sep 2020	Wind Dir	N

Station	Date	Parameter	Value
S9	22 Sep 2020	Animal Life	3 Seagulls
S9	22 Sep 2020	Floatables	Foam
S9	22 Sep 2020	Water Color	Brown
S9	22 Sep 2020	Current Direction	S
S9	22 Sep 2020	Water Temp (C)	21.8
S9	22 Sep 2020	Wave Height Low (ft)	1
S9	22 Sep 2020	High Tide (ft)	5.4
S9	22 Sep 2020 22 Sep 2020		
S9		High Tide Time	1316
	22 Sep 2020	Low Tide (ft)	2.1
S9	22 Sep 2020	Low Tide Time	648
S9	22 Sep 2020	Comments	Kelp; Seagrass; Debris; 10 Persons; Water turbid; 1
S9	29 Sep 2020	Arrive Time	723
S9	29 Sep 2020	Weather	Foggy
S9	29 Sep 2020	Wind Speed (kts)	3.3
S9	29 Sep 2020	Wind Dir	E
S9	29 Sep 2020	Animal Life	2 Godwits; 6 Seagulls
S9	29 Sep 2020	Floatables	Foam
S9	29 Sep 2020	Water Color	Green
S9	29 Sep 2020	Current Direction	
S9	29 Sep 2020	Water Temp (C)	S
S9	29 Sep 2020	Wave Height Low (ft)	20.3
S9	29 Sep 2020 29 Sep 2020	High Tide (ft)	1
			4.9
S9	29 Sep 2020	High Tide Time	849
S9	29 Sep 2020	Low Tide (ft)	0
S9	29 Sep 2020	Low Tide Time	239
S9	29 Sep 2020	Comments	Kelp; Seagrass; 4 Joggers; Water clear; Sewage-like odor
			751
S10	01 Sep 2020	Arrive Time	Cloudy
S10	01 Sep 2020	Weather	1.5
S10	01 Sep 2020	Wind Speed (kts)	
S10	01 Sep 2020	Wind Dir	W
S10	01 Sep 2020	Animal Life	2 Dolphins; 6 Godwits
S10	01 Sep 2020	Floatables	None
S10	01 Sep 2020	Water Color	Green
S10	01 Sep 2020	Current Direction	S
S10	01 Sep 2020	Water Temp (C)	20.3
S10	01 Sep 2020	Wave Height Low (ft)	2
S10	01 Sep 2020	High Tide (ft)	4.6
S10	01 Sep 2020	High Tide Time	951
S10	01 Sep 2020	Low Tide (ft)	-0.4
S10	01 Sep 2020 01 Sep 2020	Low Tide Time	342
S10	01 Sep 2020 01 Sep 2020	Comments	Kelp; Seagrass; Water clear
310	01 Sep 2020	Comments	
S10	08 Sep 2020	Arrive Time	744
S10	08 Sep 2020	Weather	Cloudy
S10	08 Sep 2020	Wind Speed (kts)	0
S10	08 Sep 2020	Wind Opeca (Ris) Wind Dir	
S10	08 Sep 2020	Animal Life	1 Seagull
S10	08 Sep 2020	Floatables	None
S10		Water Color	Grey
	08 Sep 2020		N
S10	08 Sep 2020	Current Direction	20.7
S10	08 Sep 2020	Water Temp (C)	3
S10	08 Sep 2020	Wave Height Low (ft)	4.5
S10	08 Sep 2020	High Tide (ft)	1303
S10	08 Sep 2020	High Tide Time	
S10	08 Sep 2020	Low Tide (ft)	2.2
S10	08 Sep 2020	Low Tide Time	624
S10	08 Sep 2020	Comments	Kelp; Seagrass; Water clear; Trash-1

Station	Date	Parameter	Value
S10	10 Sep 2020	Arrive Time	1014
S10	10 Sep 2020	Weather	Hazy
S10	10 Sep 2020	Wind Speed (kts)	3.6
S10	10 Sep 2020	Wind Dir	NW
S10	10 Sep 2020	Animal Life	None
S10	10 Sep 2020	Floatables	None
200000000000000000000000000000000000000		195555 DELINES - 18	
S10	10 Sep 2020	Water Color	Green
S10	10 Sep 2020	Current Direction	S
S10	10 Sep 2020	Water Temp (C)	22
S10	10 Sep 2020	Wave Height Low (ft)	2
S10	10 Sep 2020	High Tide (ft)	4.4
S10	10 Sep 2020	High Tide Time	1526
S10	10 Sep 2020	Low Tide (ft)	1.5
S10	10 Sep 2020	Low Tide Time	2218
S10	10 Sep 2020	Comments	Resample; Kelp; Seagrass; Water clear
S10	15 Sep 2020	Arrive Time	823
S10	15 Sep 2020	Weather	Hazy
S10	15 Sep 2020	Wind Speed (kts)	3.4
S10	15 Sep 2020	Wind Opeed (kts) Wind Dir	5.4 E
S10	15 Sep 2020 15 Sep 2020	Animal Life	5 Godwits
		1000	
S10	15 Sep 2020	Floatables	None
S10	15 Sep 2020	Water Color	Green
S10	15 Sep 2020	Current Direction	S
S10	15 Sep 2020	Water Temp (C)	18.9
S10	15 Sep 2020	Wave Height Low (ft)	2
S10	15 Sep 2020	High Tide (ft)	4.7
S10	15 Sep 2020	High Tide Time	846
S10	15 Sep 2020	Low Tide (ft)	-0.6
S10	15 Sep 2020	Low Tide Time	232
S10	15 Sep 2020	Comments	Kelp; Seagrass; Water clear
S10	22 Sep 2020	Arrive Time	818
S10	22 Sep 2020	Weather	Cloudy
S10	22 Sep 2020	Wind Speed (kts)	3.1
S10	22 Sep 2020	Wind Dir	N N
S10	500		2 Plovers
	22 Sep 2020	Animal Life	
S10	22 Sep 2020	Floatables	None
S10	22 Sep 2020	Water Color	Green
S10	22 Sep 2020	Current Direction	N 10 7
S10	22 Sep 2020	Water Temp (C)	19.7
S10	22 Sep 2020	Wave Height Low (ft)	2
S10	22 Sep 2020	High Tide (ft)	5.4
S10	22 Sep 2020	High Tide Time	1316
S10	22 Sep 2020	Low Tide (ft)	2.1
S10	22 Sep 2020	Low Tide Time	648
S10	22 Sep 2020	Comments	Kelp; Seagrass; Sewage-like odor; Water clear
S10	29 Sep 2020	Arrive Time	940
S10	29 Sep 2020	Weather	Sunny
S10	29 Sep 2020	Wind Speed (kts)	4.6
S10	29 Sep 2020	Wind Dir	N N
		CS 12 SSEANCE	
S10	29 Sep 2020	Animal Life	None
S10	29 Sep 2020	Floatables	Foam; Film
S10	29 Sep 2020	Water Color	Brown
S10	29 Sep 2020	Current Direction	S
S10	29 Sep 2020	Water Temp (C)	20.2
S10	29 Sep 2020	Wave Height Low (ft)	4
S10	29 Sep 2020	High Tide (ft)	4.9
S10	29 Sep 2020	High Tide Time	849
	29 Sep 2020	Low Tide (ft)	1.2

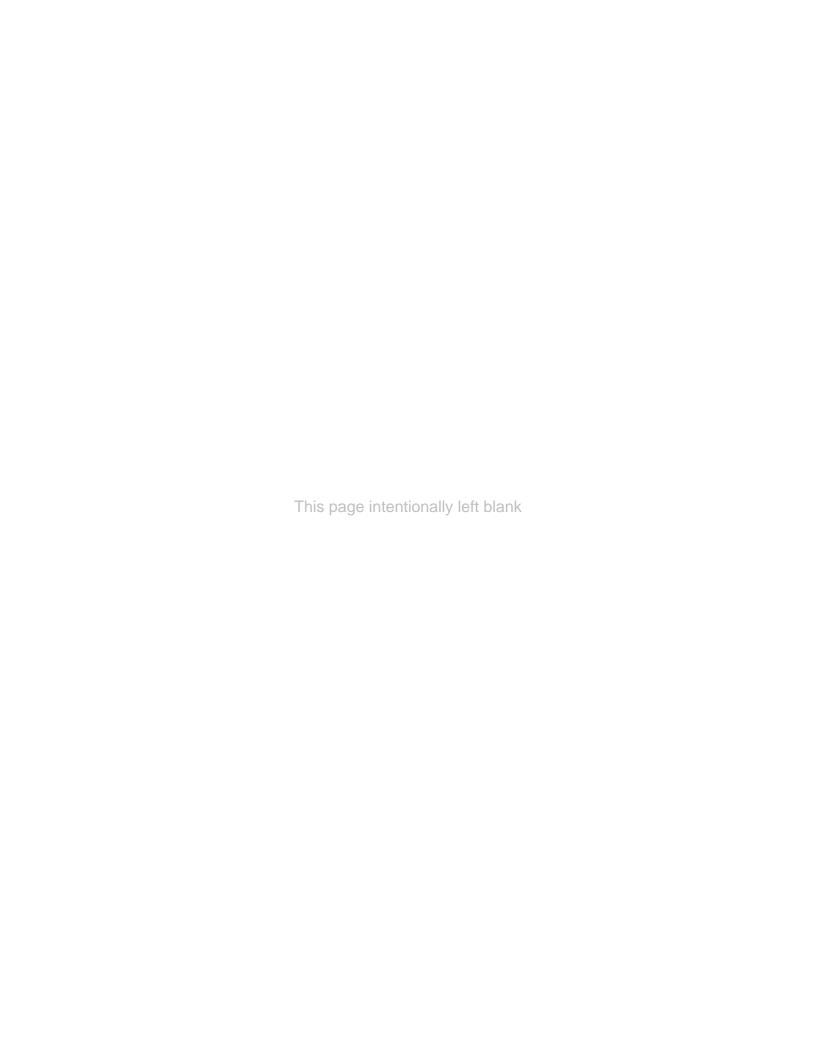
Station	Date	Parameter	Value
S10	29 Sep 2020	Low Tide Time	1440
S10	29 Sep 2020	Comments	Kelp; Seagrass; Water clear
	34.0		γ,3
S11	01 Sep 2020	Arrive Time	843
S11	01 Sep 2020	Weather	Cloudy
S11	01 Sep 2020	Wind Speed (kts)	3.4
S11	01 Sep 2020	Wind Dir	W
S11	01 Sep 2020	Animal Life	2 Dogs; 1 Dolphin
S11		Floatables	Foam
	01 Sep 2020		
S11	01 Sep 2020	Water Color	Green
S11	01 Sep 2020	Current Direction	S
S11	01 Sep 2020	Water Temp (C)	20.3
S11	01 Sep 2020	Wave Height Low (ft)	2
S11	01 Sep 2020	High Tide (ft)	4.6
S11	01 Sep 2020	High Tide Time	951
S11	01 Sep 2020	Low Tide (ft)	-0.4
S11	01 Sep 2020	Low Tide Time	342
S11	01 Sep 2020	Comments	Kelp; Seagrass; Algae; 3 Persons; Water clear
	527		** *** *** ***************************
S11	08 Sep 2020	Arrive Time	855
S11	08 Sep 2020	Weather	Cloudy
S11	08 Sep 2020	Wind Speed (kts)	1.9
S11	08 Sep 2020	Wind Dir	SW
S11	08 Sep 2020	Animal Life	1 Cormorant; 1 Dog; 1 Godwit
S11	08 Sep 2020	Floatables	None
S11	08 Sep 2020	Water Color	Grey
S11	08 Sep 2020	Current Direction	N
S11			20.6
	08 Sep 2020	Water Temp (C)	
S11	08 Sep 2020	Wave Height Low (ft)	3
S11	08 Sep 2020	High Tide (ft)	4.5
S11	08 Sep 2020	High Tide Time	1303
S11	08 Sep 2020	Low Tide (ft)	2.2
S11	08 Sep 2020	Low Tide Time	624
S11	08 Sep 2020	Comments	Kelp; Seagrass; 3 Persons; Water turbid

S11	10 Sep 2020	Arrive Time	832
S11	10 Sep 2020	Weather	Hazy
S11	10 Sep 2020	Wind Speed (kts)	2.1
S11	10 Sep 2020	Wind Dir	N
S11	10 Sep 2020	Animal Life	1 Godwit; 1 Pelican
S11	10 Sep 2020	Floatables	None
S11	10 Sep 2020	Water Color	Green
S11	10 Sep 2020	Current Direction	N
S11	10 Sep 2020	Water Temp (C)	20.7
S11	10 Sep 2020	Wave Height Low (ft)	2
S11	10 Sep 2020	High Tide (ft)	4.4
S11	10 Sep 2020	High Tide (it)	1526
F			NACCA.
S11	10 Sep 2020	Low Tide (ft)	1.5
S11	10 Sep 2020	Low Tide Time	2218 Recomplet Kelnt Seegreen 2 Personal Water clear
S11	10 Sep 2020	Comments	Resample; Kelp; Seagrass; 3 Persons; Water clear
044	45.0	Anne	700
S11	15 Sep 2020	Arrive Time	739
S11	15 Sep 2020	Weather	Hazy
S11	15 Sep 2020	Wind Speed (kts)	1.5
S11	15 Sep 2020	Wind Dir	NE
S11	15 Sep 2020	Animal Life	1 Dog; 3 Godwits
S11	15 Sep 2020	Floatables	Foam; Dead Animals
S11	15 Sep 2020	Water Color	Green
S11	15 Sep 2020	Current Direction	S
S11	15 Sep 2020	Water Temp (C)	18.6
S11	15 Sep 2020	Wave Height Low (ft)	2
	op = o= o	(it)	N o.

Station	Date	Parameter	Value
S11	15 Sep 2020	High Tide (ft)	4.7
S11	15 Sep 2020	High Tide Time	846
S11	15 Sep 2020	Low Tide (ft)	-0.6
S11	15 Sep 2020	Low Tide Time	232
S11	15 Sep 2020	Comments	Kelp; Seagrass; 5 Persons; Water clear
311	13 Sep 2020	Comments	Relp, Geaglass, 3 Persons, Water deal
S11	22 Sep 2020	Arrive Time	1050
S11	22 Sep 2020	Weather	Sunny
S11	22 Sep 2020	Wind Speed (kts)	6.4
S11	22 Sep 2020	Wind Dir	NW
S11	22 Sep 2020	Animal Life	2 Godwits
S11	22 Sep 2020	Floatables	Foam
S11	22 Sep 2020	Water Color	Green
S11	22 Sep 2020	Current Direction	NW
S11	22 Sep 2020	Water Temp (C)	21.8
S11	22 Sep 2020	Wave Height Low (ft)	3
S11	22 Sep 2020	High Tide (ft)	5.4
S11	22 Sep 2020	High Tide Time	1316
S11	22 Sep 2020	Low Tide (ft)	2.1
S11	22 Sep 2020	Low Tide (it)	648
S11	22 Sep 2020	Comments	Kelp; Seagrass; 1 Swimmer; Water clear
S11	29 Sep 2020	Arrive Time	902
S11	29 Sep 2020	Weather	Sunny
S11	29 Sep 2020	Wind Speed (kts)	6.4
S11	29 Sep 2020	Wind Dir	N
S11	29 Sep 2020	Animal Life	None
S11	29 Sep 2020	Floatables	Foam
S11	29 Sep 2020	Water Color	Green
S11	29 Sep 2020	Current Direction	S
S11	29 Sep 2020	Water Temp (C)	20.9
S11	29 Sep 2020	Wave Height Low (ft)	4
S11			4.9
336733333	29 Sep 2020	High Tide (ft)	
S11	29 Sep 2020	High Tide Time	849
S11	29 Sep 2020	Low Tide (ft)	1.2
S11	29 Sep 2020	Low Tide Time	1440
S11	29 Sep 2020	Comments	Kelp; Seagrass; 2 Persons; Water clear
S12	01 Sep 2020	Arrive Time	903
S12	01 Sep 2020	Weather	Cloudy
S12	01 Sep 2020	Wind Speed (kts)	2.5
S12	01 Sep 2020	Wind Dir	W
S12	01 Sep 2020	Animal Life	1 Dog; 19 Godwits
S12	01 Sep 2020	Floatables	Foam
S12	01 Sep 2020	Water Color	Green
S12	01 Sep 2020	Current Direction	S
S12	01 Sep 2020	Water Temp (C)	20.9
S12	01 Sep 2020	Wave Height Low (ft)	20.9
			[D) - ;
S12	01 Sep 2020	High Tide (ft)	4.6
S12	01 Sep 2020	High Tide Time	951
S12	01 Sep 2020	Low Tide (ft)	-0.4
S12	01 Sep 2020	Low Tide Time	342
S12	01 Sep 2020	Comments	Kelp; Seagrass; 1 Jogger; 5 Persons; Water clear
S12	08 Sep 2020	Arrive Time	920
S12	08 Sep 2020	Weather	Cloudy
S12	08 Sep 2020	Wind Speed (kts)	3.4
S12	08 Sep 2020	Wind Dir	SW
S12	08 Sep 2020	Animal Life	2 Godwits; 2 Terns
S12	08 Sep 2020	Floatables	None
S12	08 Sep 2020	Water Color	Brown
012	00 0ch 2020	viater color	DIOWII

Station	Date	Parameter	Value
S12	08 Sep 2020	Current Direction	N
S12	08 Sep 2020	Water Temp (C)	21.5
S12	08 Sep 2020	Wave Height Low (ft)	2
S12	08 Sep 2020	High Tide (ft)	4.5
S12	08 Sep 2020	High Tide Time	1303
S12	08 Sep 2020	Low Tide (ft)	2.2
S12	08 Sep 2020	Low Tide Time	624
S12	08 Sep 2020	Comments	Kelp; Seagrass; 1 Person; Water turbid; Trash-1
J	00 00p 2020	Commonto	Troip, Coagrado, 11 crooti, Trater tarbia, Tradit 1
S12	10 Sep 2020	Arrive Time	915
S12	10 Sep 2020	Weather	Hazy
S12	10 Sep 2020	Wind Speed (kts)	0
S12	10 Sep 2020	Wind Dir	1059
S12	10 Sep 2020	Animal Life	1 Godwit
S12	10 Sep 2020	Floatables	Foam
S12	10 Sep 2020	Water Color	Green
S12	10 Sep 2020	Current Direction	S
S12	10 Sep 2020		22.2
S12	10 Sep 2020 10 Sep 2020	Water Temp (C) Wave Height Low (ft)	3
S12 S12		High Tide (ft)	4.4
2000,000,00	10 Sep 2020		
S12	10 Sep 2020	High Tide Time	1526
S12	10 Sep 2020	Low Tide (ft)	1.5
S12	10 Sep 2020	Low Tide Time	2218
S12	10 Sep 2020	Comments	Resample; Kelp; Seagrass; 6 Persons; 1 Fisherman; Water
			clear
S12	15 Sep 2020	Arrive Time	755
S12 S12		Weather	
	15 Sep 2020		Hazy
S12 S12	15 Sep 2020	Wind Speed (kts)	1.1 E
S12 S12	15 Sep 2020	Wind Dir	Prince and the same of the same and the same
6,500,000,000	15 Sep 2020	Animal Life	2 Dogs; 7 Godwits; 1 Seagull; 4 Terns
S12	15 Sep 2020	Floatables	None
S12	15 Sep 2020	Water Color	Green
S12	15 Sep 2020	Current Direction	S
S12	15 Sep 2020	Water Temp (C)	18.9
S12	15 Sep 2020	Wave Height Low (ft)	2
S12	15 Sep 2020	High Tide (ft)	4.7
S12	15 Sep 2020	High Tide Time	846
S12	15 Sep 2020	Low Tide (ft)	-0.6
S12	15 Sep 2020	Low Tide Time	232
S12	15 Sep 2020	Comments	Kelp; Seagrass; 8 Persons; Water clear
S12	22 Sep 2020	Arrive Time	1126
S12	22 Sep 2020 22 Sep 2020	Weather	
40.00			Sunny
S12	22 Sep 2020	Wind Dis	5.4
S12	22 Sep 2020	Wind Dir	W
S12	22 Sep 2020	Animal Life	1 Dog; 5 Godwits; 1 Pelican
S12	22 Sep 2020	Floatables	Foam
S12	22 Sep 2020	Water Color	Green
S12	22 Sep 2020	Current Direction	S
S12	22 Sep 2020	Water Temp (C)	21.9
S12	22 Sep 2020	Wave Height Low (ft)	2
S12	22 Sep 2020	High Tide (ft)	5.4
S12	22 Sep 2020	High Tide Time	1316
S12	22 Sep 2020	Low Tide (ft)	2.1
S12	22 Sep 2020	Low Tide Time	648
S12	22 Sep 2020	Comments	Kelp; Seagrass; 1 Jogger; 2 Persons; 1 Fisherman; Water
			clear
	00.0	A Vand Carry Towns	
S12	29 Sep 2020	Arrive Time	834
S12	29 Sep 2020	Weather	Partly Cloudy

Station	Date	Parameter	Value	
S12	29 Sep 2020	Wind Speed (kts)	4.4	
S12	29 Sep 2020	Wind Dir	N	
S12	29 Sep 2020	Animal Life	1 Dog; 10 Godwits; 4 Seagulls	
S12	29 Sep 2020	Floatables	Foam	
S12	29 Sep 2020	Water Color	Green	
S12	29 Sep 2020	Current Direction	S	
S12	29 Sep 2020	Water Temp (C)	20.4	
S12	29 Sep 2020	Wave Height Low (ft)	3	
S12	29 Sep 2020	High Tide (ft)	4.9	
S12	29 Sep 2020	High Tide Time	849	
S12	29 Sep 2020	Low Tide (ft)	0	
S12	29 Sep 2020	Low Tide Time	239	
S12	29 Sep 2020	Comments	Kelp; Seagrass; 1 Person; Water clear	



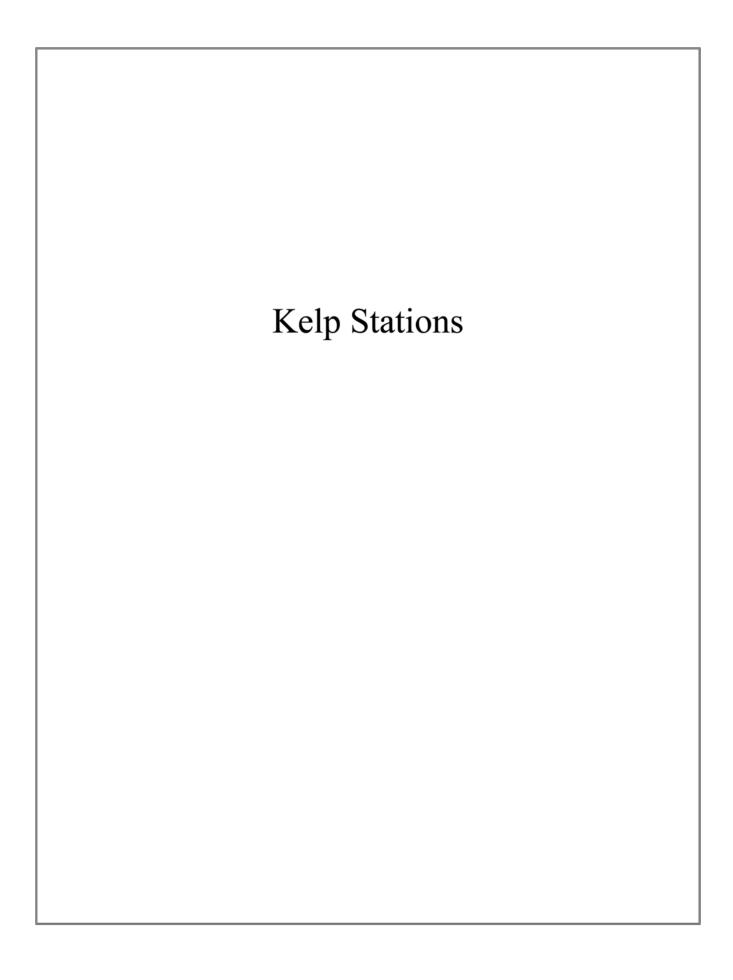


Table 3.1

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for total coliform bacteria at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >1,000 CFU/100 mL exceed the standard.

Date	119	124	125	126	132	139	140
01 Sep 2020	14	12	9	9	4	4	34
02 Sep 2020	14	12	9	9	4	4	34
03 Sep 2020	3*	3*	2*	2*	2*	2*	8*
04 Sep 2020	3*	3*	2*	2*	2*	2*	8*
05 Sep 2020	3*	3*	2*	2*	2*	2*	8*
06 Sep 2020	3*	3*	2*	2*	2*	2*	8*
07 Sep 2020	3*	3*	2*	2*	2*	2*	8*
08 Sep 2020	15	13	11	12	8	6	33
09 Sep 2020	15	13	11	12	8	6	33
10 Sep 2020	24*	22*	17*	18*	11*	7*	67*
11 Sep 2020	24*	22*	17*	18*	11*	7*	67*
12 Sep 2020	24*	22*	17*	18*	11*	7*	67*
13 Sep 2020	24*	22*	17*	18*	11*	7*	67*
14 Sep 2020	15	13	12	12	11	6	33
15 Sep 2020	15	13	12	12	11	6	33
16 Sep 2020	17*	22*	18*	18*	14*	7*	44*
17 Sep 2020	17*	22*	18*	18*	14*	7*	44*
18 Sep 2020	17*	22*	18*	18*	14*	7*	44*
19 Sep 2020	17*	22*	18*	18*	14*	7*	44*
20 Sep 2020	17*	22*	18*	18*	14*	7*	44*
21 Sep 2020	11	18	12	12	13	5	24
22 Sep 2020	11	18	12	12	13	5	24
23 Sep 2020	11	18	12	12	13	5	24
24 Sep 2020	11	18	12	12	13	5	24
25 Sep 2020	11	18	12	12	13	5	24
26 Sep 2020	17*	31*	18*	18*	20*	7*	25*
27 Sep 2020	17*	31*	18*	18*	20*	7*	25*
28 Sep 2020	16	24	15	12	15	7	20
29 Sep 2020	16	24	15	12	15	7	20
30 Sep 2020	28*	31*	25*	18*	25*	10*	25*

^{*} Geometric mean calculated using n<5

Table 3.2

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for fecal coliform bacteria at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >200 CFU/100 mL exceed the standard.

Date	119	124	125	126	132	139	140
01 Sep 2020	9	7	7	6	2	2	14
02 Sep 2020	9	7	7	6	2	2	14
03 Sep 2020	2*	2*	2*	2*	2*	2*	3*
04 Sep 2020	2*	2*	2*	2*	2*	2*	3*
05 Sep 2020	2*	2*	2*	2*	2*	2*	3*
06 Sep 2020	2* 2*	2* 2*	2* 2*	2*	2*	2* 2*	3*
07 Sep 2020	2*	2*	2*	2*	2*	2*	3*
08 Sep 2020	9	7	8	9	3	5	12
09 Sep 2020	9	7	8	9	3	5	12
10 Sep 2020	13*	10*	11*	14*	3*	6*	18*
11 Sep 2020	13*	10*	11*	14*	3*	6*	18*
12 Sep 2020	13*	10*	11*	14*	3*	6*	18*
13 Sep 2020	13*	10*	11*	14*	3*	6*	18*
14 Sep 2020	9		8	9	3	5	12
15 Sep 2020	9	7 7	8	9	3	5	12
16 Sep 2020	13*	10*	11*	14*	3*	6*	11*
17 Sep 2020	13*	10*	11*	14*	3*	6*	11*
18 Sep 2020	13*	10*	11*	14*	3*	6*	11*
19 Sep 2020	13*	10*	11*	14*	3*	6*	11*
20 Sep 2020	13*	10*	11*	14*	3*	6*	11*
21 Sep 2020	9	7	8	9	3	5	8
22 Sep 2020	9	7	8	9	3	5	8
23 Sep 2020	9	7 7 7	8	9	3	5	8
24 Sep 2020	9		8	9	3	5	8
25 Sep 2020	9	7	8	9	3	5	8
26 Sep 2020	13*	10*	11*	14*	3*	6*	11*
27 Sep 2020	13*	10*	11*	14*	3*	6*	11*
28 Sep 2020	9	7	8	9	3	5	8
29 Sep 2020	9	7	8	9	3	5	8
30 Sep 2020	13*	9*	11*	14*	3*	6*	11*

^{*} Geometric mean calculated using n<5

Table 3.3

Summary of compliance with the Ocean Plan's 30-day Geometric Mean standard for *Enterococcus* at the SBOO kelp stations. Data are based on the geometric mean of the five most recent samples from each site over the previous 30 days unless otherwise noted (*). Values >35 CFU/100 mL exceed the standard.

Date	119	124	125	126	132	139	140
01 Sep 2020	7	5	5	4	2	2	7
02 Sep 2020	7	5	5	4	2	2	7
03 Sep 2020	2*	2*	2*	2*	2*	2*	7 2*
04 Sep 2020	2*	2*	2*	2*	2*	2*	2*
05 Sep 2020	2*	2*	2*	2*	2*	2*	2*
06 Sep 2020	2*	2*	2*	2*	2*	2*	2*
07 Sep 2020	2* 2*	2* 2*	2*	2* 2* 2*	2* 2* 2* 2* 2*	2* 2* 2* 2* 2*	2* 2* 2* 2* 7
08 Sep 2020	8	6	6	7	3	5	7
09 Sep 2020	8	6	6	7	3	5	7
10 Sep 2020	11*	8*	9*	10*	3*	6*	10*
11 Sep 2020	11*	8*	9*	10*	3*	6*	10*
12 Sep 2020	11*	8*	9*	10*	3*	6*	10*
13 Sep 2020	11*	8*	9*	10*	3*	6*	10*
14 Sep 2020	8	6	6	7	3	5	7 7
15 Sep 2020	8	6	6	7	3	5	7
16 Sep 2020	11*	8*	9*	10*	3*	6*	10*
17 Sep 2020	11*	8*	9*	10*	3*	6*	10*
18 Sep 2020	11*	8*	9*	10*	3*	6*	10*
19 Sep 2020	11*	8*	9*	10*	3*	6*	10*
20 Sep 2020	11*	8*	9*	10*	3*	6*	10*
21 Sep 2020	8	6	6		3	5	7
22 Sep 2020	8	6	6	7 7 7 7	3	5	7 7 7 7 7
23 Sep 2020	8	6	6	7	3	5	7
24 Sep 2020	8	6	6	7	3	5	7
25 Sep 2020	8	6	6	7	3	5	7
26 Sep 2020	11*	8*	9*	10*	3*	6*	10*
27 Sep 2020	11*	8*	9*	10*	3*	6*	10*
28 Sep 2020	8	6	6	7	3	5	7
29 Sep 2020	8	6	6	7	3	5	7
30 Sep 2020	11*	8*	9*	10*	3*	6*	7 7 10*

^{*} Geometric mean calculated using n<5

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria, which states that total coliform density shall not exceed 10,000 CFU/100 mL.

Date	119	124	125	126	132	139	140
08 Sep 2020	Е	IC	E	Е	IC	IC	Е
14 Sep 2020	IC						
21 Sep 2020	IC						
28 Sep 2020	IC						

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for fecal coliform bacteria, which states that fecal coliform density shall not exceed 400 CFU/100 mL.

Date	119	124	125	126	132	139	140
08 Sep 2020	Ε	E	E	E	IC	E	Е
14 Sep 2020	IC						
21 Sep 2020	IC						
28 Sep 2020	IC						

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for *Enterococcus* bacteria, which states that *Enterococcus* density shall not exceed 104 CFU/100 mL.

Date	119	124	125	126	132	139	140
08 Sep 2020	Е	Е	E	Е	IC	Е	Е
14 Sep 2020	IC						
21 Sep 2020	IC						
28 Sep 2020	IC						

Summary of compliance at the SBOO kelp stations with the Ocean Plan's Single Sample Maximum standard for total coliform bacteria and the fecal/total coliform ratio (F:T), which states that total coliform density shall not exceed 1,000 CFU/100 mL when F:T > 0.1.

Date	119	124	125	126	132	139	140
08 Sep 2020	Е	E	E	E	IC	IC	Е
14 Sep 2020	IC						
21 Sep 2020	IC						
28 Sep 2020	IC						

Table 3.8

Summary of water quality parameters at the SBOO kelp stations for each sample date. Densities of total coliform (Total), fecal coliform (Fecal) and Enterococcus (Entero) bacteria are reported as CFU/100 mL; the fecal:total coliform ratio (F:T) is unitless; values for temperature (Temp, $^{\circ}$ C), transmissivity (XMS, $^{\circ}$), dissolved oxygen (DO, mg/L), salinity (Sal, ppt) and pH were extracted from CTD profile data for depths closest to those at which the bacteriological samples were collected. Comments follow the data summary.

Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	рŀ
119	08 Sep 2020	1031	2	12000	8600	2000e	0.717	18.7	77.03	8.2	33.41	8.2
119	08 Sep 2020	1031	6	8600	2400e	3200e	0.279	18.6	76.54	8.1	33.42	8.2
119	08 Sep 2020	1031	11	11000	1000	900	0.091	18.6	74.74	8.0	33.42	8.1
119	14 Sep 2020	1019	2	2e	<2	<2	1.000	18.9	79.42	7.7	33.56	8.2
119	14 Sep 2020	1019	6	<2	<2	<2	1.000	17.9	75.93	7.7	33.89	8.2
119	14 Sep 2020	1019	11	<2	<2	<2	1.000	16.8	69.79	7.8	33.66	8.1
119	21 Sep 2020	1143	2	<2	<2	<2	1.000	18.3	80.55	7.9	33.48	8.1
119	21 Sep 2020	1143	6	<2	<2	<2	1.000	17.0	80.18	8.1	33.46	8.
119	21 Sep 2020	1143	11	<2	<2	<2	1.000	14.6	74.39	7.7	33.42	8.
119	28 Sep 2020	1050	2	<2	<2	<2	1.000	19.8	73.38	7.7	33.47	8.
119	28 Sep 2020	1050	6	<20	<2	<2	0.100	17.8	58.81	7.3	33.46	8.
119	28 Sep 2020	1050	11	<20	<2	<2	0.100	16.5	67.99	7.5	33.43	8.
124	08 Sep 2020	1052	2	7000	840	500	0.120	18.4	82.41	8.6	33.44	8.
124	08 Sep 2020	1052	6	8000	720	620	0.090	18.4	82.38	8.5	33.44	8.
124	08 Sep 2020	1052	11	6000	1200e	540	0.200	18.4	79.72	8.5	33.44	8.
124	14 Sep 2020	1042	2	<2	<2	<2	1.000	19.5	80.71	8.4	33.52	8.
124	14 Sep 2020	1042	6	<2	<2	<2	1.000	17.8	72.49	7.8	33.51	8.
124	14 Sep 2020	1042	11	2e	<2	<2	1.000	16.8	79.99	7.3	33.46	8.
124	21 Sep 2020	1204	2	<2	<2	<2	1.000	18.8	86.44	8.1	33.49	8.
124	21 Sep 2020	1204	6	<2	<2	<2	1.000	16.5	82.65	8.3	33.46	8.
124	21 Sep 2020	1204	11	<20	<2	<2	0.100	14.4	65.99	6.2	33.45	7.
124	28 Sep 2020	1115	2	<2	<2	<2	1.000	19.9	81.69	7.8	33.49	8.
124	28 Sep 2020	1115	6	4e	<2	<2	0.500	17.7	80.84	7.5	33.46	8.
124	28 Sep 2020	1115	11	<20	<2	<2	0.100	17.0	46.65	7.4	33.37	8
125	08 Sep 2020	1101	2	9600	980	720	0.102	18.4	81.81	8.5	33.44	8
125	08 Sep 2020	1101	6	11000	1800e	780	0.164	18.4	81.71	8.5	33.44	8.
125	08 Sep 2020	1101	9	8200	3600e	540	0.439	18.3	81.41	8.4	33.43	8
125	14 Sep 2020	1052	2	<2	<2	<2	1.000	19.9	82.67	8.4	33.51	8
125	14 Sep 2020	1052	6	<2	<2	<2	1.000	17.6	74.42	7.8	33.49	8
125	14 Sep 2020	1052	9	4e	<2	<2	0.500	17.0	82.33	7.4	33.46	8
125	21 Sep 2020	1212	2	<2	<2	<2	1.000	18.8	87.29	8.2	33.49	8
125	21 Sep 2020	1212	6	<2	<2	<2	1.000	16.3	82.39	8.3	33.46	8
125	21 Sep 2020	1212	9	2e	<2	<2	1.000	14.6	71.19	6.7	33.44	8
125	28 Sep 2020	1122	2	<2	<2	<2	1.000	19.9	81.47	7.8	33.48	8
125	28 Sep 2020	1122	6	<2	<2	<2	1.000	17.8	82.35	7.9	33.48	8
125	28 Sep 2020	1122	9	<20	<2	<2	0.100	17.0	73.10	7.7	33.43	8
126	08 Sep 2020	1111	2	12000	4200	820	0.350	18.4	79.32	8.4	33.42	8
126	08 Sep 2020	1111	6	14000	4400	2000e	0.314	18.4	79.64	8.3	33.42	8
126	08 Sep 2020	1111	9	>16000	4000	900	0.250	18.4	79.49	8.3	33.42	8.

126	Station	Date	Time	Depth	Total	Fecal	Entero	F:T	Temp	XMS	DO	Sal	рΗ
126	126	14 Sep 2020	1102	2	<2	<2	<2	1.000	19.7	81.51	8.6	33.51	8.2
126	126	14 Sep 2020	1102	6	<2	<2	<2	1.000	18.0	78.80	8.9	33.50	8.2
126	126	14 Sep 2020	1102	9			<2	1.000	16.7	77.16	8.1	33.47	8.1
126	126	21 Sep 2020	1221	2	<2	<2	<2	1.000	18.4	86.09	8.2	33.49	8.1
126													8.1
126								(I) V25-C-C-			190 889	220000 11000	8.1
126	106	20 Can 2020	1122	,	~ 0	/2	-2	1 000	20.2	92.40	77	22.54	8.2
132 14 Sep 2020 1115 2 2e 2c 2c 1.000 16.8 78.57 8.1 33.44 31.20 38 Sep 2020 1123 2 20 6e 6e 0.300 18.2 75.87 7.8 33.42 33.4													
132													8.1
132	126	28 Sep 2020	1133	9	2e	<2	<2	1.000	16.8	78.57	8.1	33.44	8.1
132		08 Sep 2020				12e	10e						8.1
132	132	08 Sep 2020	1123	6	<20	6e	6e	0.300	18.2	75.87	7.8	33.42	8.1
132	132	08 Sep 2020	1123	9	3600e	6e	12e	0.002	17.9	77.49	7.9	33.43	8.1
132	132	14 Sep 2020	1115	2	2e	<2	<2	1.000	19.6	79.70	8.0	33.57	8.2
132													8.1
132								CONT. 10.10(1/10/10/10/10/10/10/10/10/10/10/10/10/10			100000000000000000000000000000000000000	5.5500000000000000000000000000000000000	8.1
132	102	14 Sep 2020	1113	9	\20	26		0.100	10.0	71.00	7.4	33.34	0.1
Section Sect													8.1
132								0.0000000000000000000000000000000000000		20 48 CAMP SAN			8.1
132	132	21 Sep 2020	1234	9	<2	<2	<2	1.000	16.4	75.50	8.1	33.45	8.1
132	132	28 Sep 2020	1149	2	<2	<2	<2	1.000	20.3	78.04	7.7	33.54	8.2
132													8.2
139			-57973 AV CONTROL						2000000 0M203	27830500 D.J.C.S.		000000000000000000000000000000000000000	8.2
139	120	00 500 2020	1010	,	~20	460	2600	22 000	10.0	05 50	0.2	22.40	8.2
139							11000000						
14 Sep 2020 959 2 22 22 22 1.000 19.9 85.91 8.5 33.52 33.91 14 Sep 2020 959 12 2e 2e 2e 2e 1.000 15.4 82.31 8.0 33.45 33.52 33.91 14 Sep 2020 959 18 2e 2e 2e 2e 1.000 14.7 85.02 7.2 33.47 33.9 21 Sep 2020 1121 12 2e 2e 2e 2e 2e			-20000000000000000000000000000000000000		200000000000000000000000000000000000000		2000	1.00000-0000000000000000000000000000000			11.000000000000000000000000000000000000	26 STREET PROCESS	8.2
14 Sep 2020 959 12 2e <2 <2 1.000 15.4 82.31 8.0 33.45 8.0 14 Sep 2020 959 18 <2 <2 <2 <2 1.000 14.7 85.02 7.2 33.47	139	08 Sep 2020	1010	18	16e	<2	4e	0.125	16.7	81.10	8.6	33.47	8.2
14 Sep 2020 959 18 <2 <2 <2 1.000 14.7 85.02 7.2 33.47 139	139	14 Sep 2020	959	2	<2	<2	<2	1.000	19.9	85.91	8.5	33.52	8.2
14 Sep 2020 959 18 <2 <2 <2 1.000 14.7 85.02 7.2 33.47 139	139	14 Sep 2020	959	12	2e	<2	<2	1.000	15.4	82.31	8.0	33.45	8.1
139	139	14 Sep 2020	959	18	<2	<2	<2	1.000	14.7	85.02	7.2	33.47	8.0
139	130	21 Sep 2020	1121	2	<2	~2	<2	1 000	17.2	84.81	8.5	33 48	8.1
139												CONTRACTOR CONTRACTOR	7.9
139													7.9
139 28 Sep 2020 1029 12 14e <2 2e 0.143 17.4 85.04 8.6 33.45 139 28 Sep 2020 1029 18 14e <2	100	00.0	4000					4 000	40.7	00.00		00.40	
139													8.2
I40 08 Sep 2020 1042 2 13000 2400e 1400e 0.185 18.6 79.37 8.5 33.42 I40 08 Sep 2020 1042 6 9000 2000e 1100 0.222 18.6 79.49 8.4 33.43 I40 14 Sep 2020 1042 9 12000 1000 960 0.083 18.6 79.49 8.4 33.43 I40 14 Sep 2020 1032 2 2e <2								500000000000000000				100300000000000000000000000000000000000	8.2
140 08 Sep 2020 1042 6 9000 2000e 1100 0.222 18.6 79.49 8.4 33.43 140 14 Sep 2020 1032 2 2e <2	139	28 Sep 2020	1029	18	14e	<2	2e	0.143	15.4	80.49	8.0	33.46	8.1
140 08 Sep 2020 1042 6 9000 2000e 1100 0.222 18.6 79.49 8.4 33.43 140 14 Sep 2020 1032 2 2e <2	140	08 Sep 2020	1042	2	13000	2400e	1400e	0.185	18.6	79.37	8.5	33.42	8.2
I40 08 Sep 2020 1042 9 12000 1000 960 0.083 18.6 79.04 8.3 33.43 I40 14 Sep 2020 1032 2 2e <2	140	08 Sep 2020	1042	6	9000	2000e	1100	0.222	18.6	79.49	8.4	33.43	8.2
140 14 Sep 2020 1032 6 2e <2													8.2
I40 14 Sep 2020 1032 6 2e <2	140	14 San 2020	1033	2	20	/2	/2	1.000	10 1	73.52	80	33 40	8.1
140 14 Sep 2020 1032 9 2e <2				6								589050-0354-5000	8.2
140 21 Sep 2020 1156 2 <2		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1											5,500,450,00
I40 21 Sep 2020 1156 6 <2	140	14 Sep 2020	1032	9	Ze	<2	<2	1.000	17.4	/1.5/	6.3	33.48	8.1
I40 21 Sep 2020 1156 9 <2								200000000000000000000000000000000000000					8.1
I40 21 Sep 2020 1156 9 <2	140	21 Sep 2020	1156	6		<2	<2	1.000	16.6	79.64	8.2	33.45	8.1
140 28 Sep 2020 1105 6 2e <2	140	21 Sep 2020	1156	9				1.000	14.6	67.76	6.7	33.45	8.0
140 28 Sep 2020 1105 6 2e <2	140	28 Sen 2020	1105	2	<2	<2	<2	1.000	19 9	74 90	7.3	33 50	8.1
													8.1
140 28 Sep 2020 1105 9 <20 <2 <2 0.100 16.4 54.31 7.1 33.44													8.1

Table 3.9Summary of visual observations made during the month for each SBOO kelp station by sample date.

Station	Date	Parameter	Value
I19	08 Sep 2020	Depth (m)	11
119	08 Sep 2020	Arrive Time	1031
119	08 Sep 2020	Depart Time	1036
119	08 Sep 2020	Air Temp (C)	20
119	08 Sep 2020	Weather	Overcast
119	08 Sep 2020	Visibility (mi)	5
119	08 Sep 2020	Wind Speed (kts)	7
119	08 Sep 2020	Wind Dir	SE
119	08 Sep 2020	Water Color	Green
119	08 Sep 2020	Wave Ht Low (ft)	4
119	08 Sep 2020	Wave Period (sec)	16
119	08 Sep 2020	Sea State	Wind ripples
119	08 Sep 2020	High Tide (ft)	4.48
119	08 Sep 2020	High Tide (it)	1303
119			2.21
119	08 Sep 2020	Low Tide (ft)	624
	08 Sep 2020	Low Tide Time	Na Anna Carlos
119	08 Sep 2020	Comments	none
119	14 Sep 2020	Depth (m)	10
119	14 Sep 2020	Arrive Time	1019
119	14 Sep 2020	Depart Time	1024
119	14 Sep 2020	Air Temp (C)	20
119	14 Sep 2020	Weather	Partly Cloudy
119	14 Sep 2020	Visibility (mi)	5
I19	14 Sep 2020	Wind Speed (kts)	4
119	14 Sep 2020	Wind Dir	NW
l19	14 Sep 2020	Water Color	Green
119	14 Sep 2020	Wave Ht Low (ft)	2
119	14 Sep 2020	Wave Period (sec)	9
119	14 Sep 2020	Sea State	Calm
119	14 Sep 2020	High Tide (ft)	4.33
119	14 Sep 2020	High Tide Time	819
119	14 Sep 2020	Low Tide (ft)	1.87
119	14 Sep 2020	Low Tide (it)	1337
119	14 Sep 2020	Comments	
119	14 Sep 2020	Comments	none
119	21 Sep 2020	Depth (m)	11
119	21 Sep 2020	Arrive Time	1143
119	21 Sep 2020	Depart Time	1145
119	21 Sep 2020	Air Temp (C)	20
119	21 Sep 2020	Weather	Haze
119	21 Sep 2020	Visibility (mi)	10
119	21 Sep 2020	Wind Speed (kts)	4
119	21 Sep 2020	Wind Dir	NW
119	21 Sep 2020	Water Color	Greenish-Blue
119	21 Sep 2020	Wave Ht Low (ft)	2
119	21 Sep 2020	Wave Period (sec)	11
119	21 Sep 2020	Sea State	Light chop
119	21 Sep 2020	High Tide (ft)	5.69
119	21 Sep 2020	High Tide Time	1221
119	21 Sep 2020	Low Tide (ft)	1.43
119	21 Sep 2020	Low Tide (it)	604
119	21 Sep 2020	Comments	none
	5. 4. (2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	DESTRUMENTS STANCES (CAS)	100 Accordant
119	28 Sep 2020	Depth (m)	11
119	28 Sep 2020	Arrive Time	1050

Station	Date	Parameter	Value
119	28 Sep 2020	Depart Time	1055
119	28 Sep 2020	Air Temp (C)	20
119	28 Sep 2020	Weather	Overcast
119	28 Sep 2020	Visibility (mi)	12
119	28 Sep 2020	Wind Speed (kts)	10
119	28 Sep 2020	Wind Dir	NW
119	28 Sep 2020	Water Color	Green
119	28 Sep 2020	Wave Ht Low (ft)	3
			9
119	28 Sep 2020	Wave Period (sec)	
119	28 Sep 2020	Sea State	Calm
119	28 Sep 2020	High Tide (ft)	4.72
119	28 Sep 2020	High Tide Time	827
119	28 Sep 2020	Low Tide (ft)	1.57
119	28 Sep 2020	Low Tide Time	1408
119	28 Sep 2020	Comments	none
124	08 Sep 2020	Depth (m)	12
124	08 Sep 2020	Arrive Time	1052
124	08 Sep 2020	Depart Time	1057
124	08 Sep 2020	Air Temp (C)	21
124	08 Sep 2020	Weather	Overcast
124	08 Sep 2020	Visibility (mi)	5
			6
124	08 Sep 2020	Wind Speed (kts)	
124	08 Sep 2020	Wind Dir	SE
124	08 Sep 2020	Water Color	Green
124	08 Sep 2020	Wave Ht Low (ft)	4
124	08 Sep 2020	Wave Period (sec)	16
124	08 Sep 2020	Sea State	Wind ripples
124	08 Sep 2020	High Tide (ft)	4.48
124	08 Sep 2020	High Tide Time	1303
124	08 Sep 2020	Low Tide (ft)	2.21
124	08 Sep 2020	Low Tide Time	624
124	08 Sep 2020	Comments	none
124	14 Sep 2020	Depth (m)	10
124	14 Sep 2020	Arrive Time	1042
			1048
124	14 Sep 2020	Depart Time	
124	14 Sep 2020	Air Temp (C)	20
124	14 Sep 2020	Weather	Partly Cloudy
124	14 Sep 2020	Visibility (mi)	5
124	14 Sep 2020	Wind Speed (kts)	8
124	14 Sep 2020	Wind Dir	W
124	14 Sep 2020	Water Color	Green
124	14 Sep 2020	Wave Ht Low (ft)	2
124	14 Sep 2020	Wave Period (sec)	9
124	14 Sep 2020	Sea State	Calm
124	14 Sep 2020	High Tide (ft)	4.33
124	14 Sep 2020	High Tide Time	819
124	14 Sep 2020	Low Tide (ft)	1.87
124	14 Sep 2020	Low Tide (II)	1337
124	14 Sep 2020	Comments	none
		12.050mm/creeded	350
124	21 Sep 2020	Depth (m)	11
124	21 Sep 2020	Arrive Time	1204
124	21 Sep 2020	Depart Time	1206
124	21 Sep 2020	Air Temp (C)	20
124	21 Sep 2020	Weather	Haze
124	21 Sep 2020	Visibility (mi)	12
	21 Sep 2020	Wind Speed (kts)	6
124		Trilla Opood (No)	
124 124	21 Sep 2020	Wind Dir	W

Station	Date	Parameter	Value
124	21 Sep 2020	Wave Ht Low (ft)	2
124	21 Sep 2020	Wave Period (sec)	11
124	21 Sep 2020	Sea State	Light chop
124	21 Sep 2020	High Tide (ft)	5.69
124	21 Sep 2020	High Tide Time	1221
		The state of the s	
124	21 Sep 2020	Low Tide (ft)	1.43
124	21 Sep 2020	Low Tide Time	604
124	21 Sep 2020	Comments	none
124	28 Sep 2020	Depth (m)	8
124	28 Sep 2020	Arrive Time	1115
124	28 Sep 2020	Depart Time	1118
124	28 Sep 2020	Air Temp (C)	20
124	28 Sep 2020	Weather	Overcast
124	28 Sep 2020	Visibility (mi)	12
124	28 Sep 2020	Wind Speed (kts)	7
124	28 Sep 2020	Wind Dir	NW
124	28 Sep 2020	Water Color	Green
124	28 Sep 2020	Wave Ht Low (ft)	3
124	28 Sep 2020	Wave Period (sec)	9
124	28 Sep 2020	Sea State	Calm
124	28 Sep 2020	High Tide (ft)	4.72
		11 (4 (2 C) 1 (4	125, 2570.11
124	28 Sep 2020	High Tide Time	827
124	28 Sep 2020	Low Tide (ft)	1.57
124	28 Sep 2020	Low Tide Time	1408
124	28 Sep 2020	Comments	none
125	08 Sep 2020	Depth (m)	10
125	08 Sep 2020	Arrive Time	1101
125	08 Sep 2020	Depart Time	1103
	1870 847 14 00 mm unit 500 500 000 000		21
125	08 Sep 2020	Air Temp (C)	1707t
125	08 Sep 2020	Weather	Overcast
125	08 Sep 2020	Visibility (mi)	5
125	08 Sep 2020	Wind Speed (kts)	7
125	08 Sep 2020	Wind Dir	SE
125	08 Sep 2020	Water Color	Green
125	08 Sep 2020	Wave Ht Low (ft)	4
125	08 Sep 2020	Wave Period (sec)	16
125		Sea State	Wind ripples
2000000000	08 Sep 2020		
125	08 Sep 2020	High Tide (ft)	4.48
125	08 Sep 2020	High Tide Time	1303
125	08 Sep 2020	Low Tide (ft)	2.21
125	08 Sep 2020	Low Tide Time	624
125	08 Sep 2020	Comments	none
125	14 Sep 2020	Depth (m)	10
125	14 Sep 2020	Arrive Time	1052
			1056
125	14 Sep 2020	Depart Time	
125	14 Sep 2020	Air Temp (C)	21
125	14 Sep 2020	Weather	Partly Cloudy
125	14 Sep 2020	Visibility (mi)	5
125	14 Sep 2020	Wind Speed (kts)	6
125	14 Sep 2020	Wind Dir	SW
125	14 Sep 2020	Water Color	Green
			QQQXXXXXXX
125	14 Sep 2020	Wave Ht Low (ft)	2
125	14 Sep 2020	Wave Period (sec)	9
125	14 Sep 2020	Sea State	Calm
125	14 Sep 2020	High Tide (ft)	4.33
125	14 Sep 2020	High Tide Time	819
125	14 Sep 2020	Low Tide (ft)	1.87
120			

Station	Date	Parameter	Value
125	14 Sep 2020	Comments	none
105		5 0 / 1	
125	21 Sep 2020	Depth (m)	9
125	21 Sep 2020	Arrive Time	1212
125	21 Sep 2020	Depart Time	1214
125	21 Sep 2020	Air Temp (C)	20
125	21 Sep 2020	Weather	Haze
125	21 Sep 2020	Visibility (mi)	12
125	21 Sep 2020	Wind Speed (kts)	5
125	21 Sep 2020	Wind Dir	NW
125	21 Sep 2020	Water Color	Greenish-Blue
125	21 Sep 2020	Wave Ht Low (ft)	2
125	21 Sep 2020	Wave Period (sec)	11
125	21 Sep 2020	Sea State	Light chop
			VIII 10 10 10 10 10 10 10
125	21 Sep 2020	High Tide (ft)	5.69
125	21 Sep 2020	High Tide Time	1221
125	21 Sep 2020	Low Tide (ft)	1.43
125	21 Sep 2020	Low Tide Time	604
125	21 Sep 2020	Comments	none
125	28 Sep 2020	Depth (m)	10
125	28 Sep 2020	Arrive Time	1122
125	28 Sep 2020	Depart Time	1125
			20
125	28 Sep 2020	Air Temp (C)	
125	28 Sep 2020	Weather	Overcast
125	28 Sep 2020	Visibility (mi)	12
125	28 Sep 2020	Wind Speed (kts)	11
125	28 Sep 2020	Wind Dir	NW
125	28 Sep 2020	Water Color	Green
125	28 Sep 2020	Wave Ht Low (ft)	3
125	28 Sep 2020	Wave Period (sec)	9
125	28 Sep 2020	Sea State	Calm
125	28 Sep 2020	High Tide (ft)	4.72
125	28 Sep 2020	High Tide Time	827
125	28 Sep 2020	Low Tide (ft)	1.57
125	28 Sep 2020	Low Tide Time	1408
125	28 Sep 2020	Comments	none
120	20 00p 2020	Comments	none.
126	08 Sep 2020	Depth (m)	10
126	08 Sep 2020	Arrive Time	1111
126	08 Sep 2020	Depart Time	1115
126	08 Sep 2020	Air Temp (C)	21
126	08 Sep 2020	Weather	Overcast
126	08 Sep 2020	Visibility (mi)	5
126	08 Sep 2020	Wind Speed (kts)	8
126	08 Sep 2020	Wind Dir	SE
126	08 Sep 2020	Water Color	Green
126	08 Sep 2020	Wave Ht Low (ft)	4
			16
126	08 Sep 2020	Wave Period (sec)	2000 - Norman 2000
126	08 Sep 2020	Sea State	Wind ripples
126	08 Sep 2020	High Tide (ft)	4.48
126	08 Sep 2020	High Tide Time	1303
126	08 Sep 2020	Low Tide (ft)	2.21
126	08 Sep 2020	Low Tide Time	624
126	08 Sep 2020	Comments	none
126	14 Son 2020	Dooth (m)	10
126	14 Sep 2020	Depth (m)	10
126	14 Sep 2020	Arrive Time	1102
126	14 Sep 2020	Depart Time	1106
126	14 Sep 2020	Air Temp (C)	20
126	14 Sep 2020	Weather	Partly Cloudy

Station	Date	Parameter	Value
126	14 Sep 2020	Visibility (mi)	5
126	14 Sep 2020	Wind Speed (kts)	11
126	14 Sep 2020	Wind Dir	W
126	14 Sep 2020	Water Color	Green
126	14 Sep 2020		2
		Wave Ht Low (ft)	
126	14 Sep 2020	Wave Period (sec)	9
126	14 Sep 2020	Sea State	Calm
126	14 Sep 2020	High Tide (ft)	4.33
126	14 Sep 2020	High Tide Time	819
126	14 Sep 2020	Low Tide (ft)	1.87
126	14 Sep 2020	Low Tide Time	1337
126	14 Sep 2020	Comments	none
120	14 Sep 2020	Comments	none
126	21 Sep 2020	Depth (m)	9
126	21 Sep 2020	Arrive Time	1221
126	21 Sep 2020	Depart Time	1223
126	21 Sep 2020	Air Temp (C)	20
		0.00 (0.00)	
126	21 Sep 2020	Weather	Haze
126	21 Sep 2020	Visibility (mi)	12
126	21 Sep 2020	Wind Speed (kts)	4
126	21 Sep 2020	Wind Dir	W
126	21 Sep 2020	Water Color	Greenish-Blue
126	21 Sep 2020	Wave Ht Low (ft)	2
126	21 Sep 2020	Wave Period (sec)	11
		[] - '이 이 15시간 [] - '는 '() 15시 [20] (20) (20) (20) (20)	1.55
126	21 Sep 2020	Sea State	Light chop
126	21 Sep 2020	High Tide (ft)	5.69
126	21 Sep 2020	High Tide Time	1221
126	21 Sep 2020	Low Tide (ft)	1.43
126	21 Sep 2020	Low Tide Time	604
126	21 Sep 2020	Comments	none
126	28 Sep 2020	Depth (m)	9
126	28 Sep 2020	Arrive Time	1133
		180 AV	
126	28 Sep 2020	Depart Time	1140
126	28 Sep 2020	Air Temp (C)	20
126	28 Sep 2020	Weather	Overcast
126	28 Sep 2020	Visibility (mi)	12
126	28 Sep 2020	Wind Speed (kts)	11
126	28 Sep 2020	Wind Dir	NW
126	28 Sep 2020	Water Color	Green
126	28 Sep 2020	Wave Ht Low (ft)	3
126	28 Sep 2020	Wave Period (sec)	9
126	28 Sep 2020	Sea State	Calm
126	28 Sep 2020	High Tide (ft)	4.72
126	28 Sep 2020	High Tide Time	827
126	28 Sep 2020	Low Tide (ft)	1.57
126	28 Sep 2020	Low Tide Time	1408
126	28 Sep 2020	Comments	none
132	08 Sep 2020	Depth (m)	11
132	08 Sep 2020	Arrive Time	1123
132	08 Sep 2020	Depart Time	1128
132	08 Sep 2020	Air Temp (C)	21
132	08 Sep 2020	Weather	Overcast
132	08 Sep 2020	Visibility (mi)	5
132	08 Sep 2020	Wind Speed (kts)	9
132			SE
	08 Sep 2020	Wind Dir	
132	08 Sep 2020	Water Color	Green
132	08 Sep 2020	Wave Ht Low (ft)	4
	08 Sep 2020	Wave Period (sec)	16
132 132	08 Sep 2020	Sea State	Wind ripples

Station	Date	Parameter	Value
132	08 Sep 2020	High Tide (ft)	4.48
132	08 Sep 2020	High Tide Time	1303
132	08 Sep 2020	Low Tide (ft)	2.21
132	08 Sep 2020	Low Tide Time	624
132	08 Sep 2020	Comments	none
102	00 Ocp 2020	Comments	Tione
132	14 Sep 2020	Depth (m)	10
132	14 Sep 2020	Arrive Time	1115
132	14 Sep 2020	Depart Time	1121
132	14 Sep 2020	Air Temp (C)	20
132	14 Sep 2020	Weather	Partly Cloudy
132	14 Sep 2020	Visibility (mi)	5
132			8
	14 Sep 2020	Wind Speed (kts)	
132	14 Sep 2020	Wind Dir	SW
132	14 Sep 2020	Water Color	Green
132	14 Sep 2020	Wave Ht Low (ft)	2
132	14 Sep 2020	Wave Period (sec)	9
132	14 Sep 2020	Sea State	Calm
132	14 Sep 2020	High Tide (ft)	4.33
132	14 Sep 2020	High Tide Time	819
132	14 Sep 2020	Low Tide (ft)	1.87
132	14 Sep 2020	Low Tide Time	1337
132	14 Sep 2020	Comments	none
132	21 Sep 2020	Depth (m)	10
132	21 Sep 2020	Arrive Time	1234
132	21 Sep 2020	Depart Time	1236
132	21 Sep 2020	Air Temp (C)	20
132	21 Sep 2020	Weather	Haze
132	21 Sep 2020	Visibility (mi)	12
132	21 Sep 2020	Wind Speed (kts)	6
132	21 Sep 2020	Wind Dir	W
132	21 Sep 2020	Water Color	Greenish-Blue
132	21 Sep 2020	Wave Ht Low (ft)	2
132	21 Sep 2020	Wave Period (sec)	11
132	21 Sep 2020	Sea State	Light chop
132	21 Sep 2020	High Tide (ft)	5.69
132	21 Sep 2020	High Tide Time	1221
132	21 Sep 2020	Low Tide (ft)	1.43
132	21 Sep 2020	Low Tide Time	604
132	21 Sep 2020	Comments	none
120	20 0 2020	Donath (ms)	
132	28 Sep 2020	Depth (m)	9
132	28 Sep 2020	Arrive Time	1149
132	28 Sep 2020	Depart Time	1153
132	28 Sep 2020	Air Temp (C)	20
132	28 Sep 2020	Weather	Overcast
132	28 Sep 2020	Visibility (mi)	12
132	28 Sep 2020	Wind Speed (kts)	12
132	28 Sep 2020	Wind Dir	w
132	28 Sep 2020	Water Color	Green
132	28 Sep 2020	Wave Ht Low (ft)	3
132	28 Sep 2020	Wave Period (sec)	9
132	28 Sep 2020	Sea State	Calm
132	28 Sep 2020	High Tide (ft)	4.72
132	28 Sep 2020	High Tide Time	827
132	28 Sep 2020	Low Tide (ft)	1.57
132	28 Sep 2020	Low Tide Time	1408
132	28 Sep 2020	Comments	none
	-10		
	ENERGING PRODUCT	3043 92 230 26	20

Station	Date	Parameter	Value
139	08 Sep 2020	Arrive Time	1010
139	08 Sep 2020	Depart Time	1016
139	08 Sep 2020	Air Temp (C)	20
139	08 Sep 2020	Weather	Overcast
139	08 Sep 2020	Visibility (mi)	5
139	08 Sep 2020	Wind Speed (kts)	2
139	08 Sep 2020	Wind Dir	S
139	08 Sep 2020	Water Color	Green
139	08 Sep 2020	Wave Ht Low (ft)	4
139	08 Sep 2020	Wave Period (sec)	16
139	08 Sep 2020	Sea State	Wind ripples
139	08 Sep 2020	High Tide (ft)	4.48
139	08 Sep 2020	High Tide Time	1303
139	08 Sep 2020	Low Tide (ft)	2.21
139	08 Sep 2020	Low Tide Time	624
139	08 Sep 2020	Comments	
139	06 Sep 2020	Comments	none
139	14 Sep 2020	Depth (m)	18
139	14 Sep 2020	Arrive Time	959
139	14 Sep 2020	Depart Time	1003
139	14 Sep 2020	Air Temp (C)	20
		U.S. 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
139	14 Sep 2020	Weather	Partly Cloudy
139	14 Sep 2020	Visibility (mi)	5
139	14 Sep 2020	Wind Speed (kts)	0
139	14 Sep 2020	Wind Dir	type
139	14 Sep 2020	Water Color	Green
139	14 Sep 2020	Wave Ht Low (ft)	2
139	14 Sep 2020	Wave Period (sec)	9
139	14 Sep 2020	Sea State	Calm
139	14 Sep 2020	High Tide (ft)	4.33
139	14 Sep 2020	High Tide (it)	819
139	14 Sep 2020	Low Tide (ft)	1.87
139	14 Sep 2020	Low Tide Time	1337
139	14 Sep 2020	Comments	none
139	21 Sep 2020	Depth (m)	19
139	21 Sep 2020	Arrive Time	1121
139	21 Sep 2020	E80	1123
		Depart Time	
139	21 Sep 2020	Air Temp (C)	19
139	21 Sep 2020	Weather	Haze
139	21 Sep 2020	Visibility (mi)	10
139	21 Sep 2020	Wind Speed (kts)	4
139	21 Sep 2020	Wind Dir	W
139	21 Sep 2020	Water Color	Greenish-Blue
139	21 Sep 2020	Wave Ht Low (ft)	2
139	21 Sep 2020	Wave Period (sec)	11
139	21 Sep 2020	Sea State	Light chop
139	21 Sep 2020	High Tide (ft)	5.69
139	21 Sep 2020	High Tide Time	1221
139	21 Sep 2020	Low Tide (ft)	1.43
139	21 Sep 2020	Low Tide Time	604
139	21 Sep 2020	Comments	none
130	28 San 2020	Depth (m)	10
139	28 Sep 2020	Depth (m)	19
139	28 Sep 2020	Arrive Time	1029
139	28 Sep 2020	Depart Time	1033
139	28 Sep 2020	Air Temp (C)	20
139	28 Sep 2020	Weather	Overcast
139	28 Sep 2020	Visibility (mi)	9
	28 Sep 2020	Wind Speed (kts)	10
139			

Station	Date	Parameter	Value
139	28 Sep 2020	Water Color	Green
139	28 Sep 2020	Wave Ht Low (ft)	3
139	28 Sep 2020	Wave Period (sec)	9
139	28 Sep 2020	Sea State	Calm
139	28 Sep 2020	High Tide (ft)	4.72
139	28 Sep 2020	High Tide Time	827
139	28 Sep 2020	Low Tide (ft)	1.57
139	28 Sep 2020	Low Tide Time	1408
139	28 Sep 2020	Comments	none
140	08 Sep 2020	Depth (m)	11
140	08 Sep 2020	Arrive Time	1042
140	08 Sep 2020	Depart Time	1047
140	08 Sep 2020	Air Temp (C)	21
140	08 Sep 2020	Weather	Overcast
140	08 Sep 2020	Visibility (mi)	5
140	08 Sep 2020	Wind Speed (kts)	6
140	08 Sep 2020	Wind Dir	SE
			Green
140	08 Sep 2020	Water Color	\$1700 AFA (1992)
140	08 Sep 2020	Wave Ht Low (ft)	4
140	08 Sep 2020	Wave Period (sec)	16
140	08 Sep 2020	Sea State	Wind ripples
140	08 Sep 2020	High Tide (ft)	4.48
140	08 Sep 2020	High Tide Time	1303
140	08 Sep 2020	Low Tide (ft)	2.21
140	08 Sep 2020	Low Tide Time	624
140	08 Sep 2020	Comments	none
140	14 Sep 2020	Depth (m)	10
140	14 Sep 2020	Arrive Time	1032
140	14 Sep 2020	Depart Time	1036
140	14 Sep 2020	Air Temp (C)	20
140	14 Sep 2020	Weather	Partly Cloudy
140	14 Sep 2020	Visibility (mi)	5
140	14 Sep 2020	Wind Speed (kts)	1
140	14 Sep 2020	Wind Dir	NW
140	14 Sep 2020	Water Color	Green
140	14 Sep 2020	Wave Ht Low (ft)	2
	14 Sep 2020		
140		Wave Period (sec)	9
140	14 Sep 2020	Sea State	Calm
140	14 Sep 2020	High Tide (ft)	4.33
140	14 Sep 2020	High Tide Time	819
140	14 Sep 2020	Low Tide (ft)	1.87
140	14 Sep 2020	Low Tide Time	1337
140	14 Sep 2020	Comments	green algae floating on surface; Seagrass; (Ulva intestinalis?)
140	21 Sep 2020	Depth (m)	10
140	21 Sep 2020	Arrive Time	1156
140	21 Sep 2020	Depart Time	1158
140	21 Sep 2020	Air Temp (C)	20
140	21 Sep 2020	Weather	Haze
140	21 Sep 2020 21 Sep 2020	Visibility (mi)	11
140	21 Sep 2020 21 Sep 2020		6
		Wind Speed (kts)	W
140	21 Sep 2020	Wind Dir	1975) - 1975) - 1975 -
140	21 Sep 2020	Water Color	Greenish-Brown
140	21 Sep 2020	Wave Ht Low (ft)	2
140	21 Sep 2020	Wave Period (sec)	11
140	21 Sep 2020	Sea State	Light chop
140	21 Sep 2020	High Tide (ft)	5.69
	21 Sep 2020	High Tide Time	1221
140	21 Sep 2020	Low Tide (ft)	1.43

Station	Date	Parameter	Value
140	21 Sep 2020	Low Tide Time	604
140	21 Sep 2020	Comments	none
140	28 Sep 2020	Depth (m)	9
140	28 Sep 2020	Arrive Time	1105
140	28 Sep 2020	Depart Time	1109
140	28 Sep 2020	Air Temp (C)	20
140	28 Sep 2020	Weather	Overcast
140	28 Sep 2020	Visibility (mi)	12
140	28 Sep 2020	Wind Speed (kts)	9
140	28 Sep 2020	Wind Dir	W
140	28 Sep 2020	Water Color	Green
140	28 Sep 2020	Wave Ht Low (ft)	3
140	28 Sep 2020	Wave Period (sec)	9
140	28 Sep 2020	Sea State	Calm
140	28 Sep 2020	High Tide (ft)	4.72
140	28 Sep 2020	High Tide Time	827
140	28 Sep 2020	Low Tide (ft)	1.57
140	28 Sep 2020	Low Tide Time	1408
140	28 Sep 2020	Comments	none

Table 3.10Summary of CTD profile data from the SBOO kelp stations for each sample date.

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pН	Dens (σ-t)	Chlor (μg/L)
119	08 Sep 2020	1	18.69	76.86	8.2	33.41	8.2	23.9	2.30
119	08 Sep 2020	2	18.67	77.03	8.2	33.41	8.2	23.9	2.46
119	08 Sep 2020	3	18.64	76.97	8.2	33.42	8.2	23.9	2.52
119	08 Sep 2020	3 4 5 6	18.63	76.50	8.1	33.42	8.2	23.9	2.52
119	08 Sep 2020	5	18.63	76.30	8.1	33.42	8.2	23.9	2.52
119	08 Sep 2020	6	18.63	76.54	8.1	33.42	8.2	23.9	2.54
119	08 Sep 2020	7	18.62	76.21	8.1	33.42	8.2	23.9	2.53
119	08 Sep 2020	8	18.60	75.93	8.1	33.42	8.1	23.9	2.48
119	08 Sep 2020	9	18.59	75.61	8.1	33.42	8.1	23.9	2.46
119	08 Sep 2020	10	18.57	74.74	8.0	33.42	8.1	23.9	2.35
119	06 Sep 2020	10	10.57	14.14	0.0	33.42	0.1	23.9	2.33
119	14 Sep 2020	1	19.09	78.97	7.4	33.35	8.2	23.7	0.26
I19	14 Sep 2020	2	18.95	79.42	7.7	33.56	8.2	23.9	0.27
119	14 Sep 2020	2 3	18.71	78.24	7.6	33.67	8.2	24.1	0.27
I19	14 Sep 2020	4	18.49	76.68	7.8	33.66	8.2	24.1	0.33
119	14 Sep 2020	5	18.30	76.01	7.7	33.81	8.2	24.3	0.32
119	14 Sep 2020	6	17.91	75.93	7.7	33.89	8.2	24.4	0.34
119	14 Sep 2020	4 5 6 7	17.62	75.80	7.7	33.88	8.1	24.5	0.36
119	14 Sep 2020	8	17.26	74.65	8.0	33.86	8.1	24.6	0.36
119	14 Sep 2020	9	16.94	70.83	8.2	33.74	8.1	24.6	0.40
119	14 Sep 2020	10	16.75	69.79	7.8	33.66	8.1	24.5	0.41
140	24 Con 2020	4	10.42	04.45	8.1	22.47	8.1	24.0	0.87
119	21 Sep 2020	1	18.43	81.45		33.47			
I19	21 Sep 2020	2 3	18.34	80.55	7.9	33.48	8.1	24.0	0.88
119	21 Sep 2020	3	17.52	80.59	8.2	33.48	8.1	24.2	1.15
I19	21 Sep 2020	4	17.34	80.73	8.3	33.46	8.1	24.3	1.46
119	21 Sep 2020	5	17.26	80.89	8.3	33.45	8.1	24.3	1.72
119	21 Sep 2020	4 5 6 7	17.02	80.18	8.1	33.46	8.1	24.3	2.10
119	21 Sep 2020		16.23	79.19	8.0	33.48	8.1	24.5	2.57
I19	21 Sep 2020	8	14.78	77.93	8.0	33.46	8.1	24.8	3.45
119	21 Sep 2020	9	14.59	75.93	7.8	33.43	8.0	24.8	4.31
119	21 Sep 2020	10	14.59	74.39	7.7	33.42	8.0	24.8	4.83
119	28 Sep 2020	1	19.81	73.83	7.7	33.47	8.1	23.6	0.77
119	28 Sep 2020		19.75	73.38	7.7	33.47	8.1	23.7	0.85
119	28 Sep 2020	2 3	19.58	71.85	7.5	33.47	8.1	23.7	1.16
119	28 Sep 2020	4	18.69	63.59	7.4	33.49	8.1	23.9	1.95
119	28 Sep 2020	5	18.22	57.61	7.4	33.46	8.1	24.0	3.49
119	28 Sep 2020	6	17.77	58.81	7.3	33.46	8.1	24.1	3.40
119	28 Sep 2020	7	17.19	57.16	7.3	33.46	8.1	24.3	2.69
119	28 Sep 2020	8	16.91	57.10	7.4	33.44	8.1	24.3	2.30
119	28 Sep 2020	9	16.59	66.39	7.5	33.44	8.1	24.4	2.04
119	28 Sep 2020	10	16.54	67.99	7.5	33.43	8.1	24.4	1.79
5,000	CAN LAND TO SERVICE SERVICE SERVICE AND CONTROL	25940	35000001 00000	0.0000-0.000-0		PERMIT SECTION	8555.5431	73,596,590	90.00900000
124	08 Sep 2020	1	18.44	82.45	8.6	33.44	8.2	24.0	1.96
124	08 Sep 2020	2 3	18.44	82.41	8.6	33.44	8.2	24.0	2.02
124	08 Sep 2020	3	18.43	82.46	8.6	33.44	8.2	24.0	2.15
124	08 Sep 2020	4	18.43	82.42	8.6	33.44	8.2	24.0	2.28
124	08 Sep 2020	5 6	18.43	82.52	8.6	33.44	8.2	24.0	2.32
124	08 Sep 2020	6	18.42	82.38	8.5	33.44	8.2	24.0	2.34
124	08 Sep 2020	7	18.40	81.35	8.5	33.44	8.2	24.0	2.28
124	08 Sep 2020	8	18.42	81.49	8.5	33.44	8.2	24.0	2.36
124	08 Sep 2020	9	18.41	81.99	8.4	33.44	8.2	24.0	2.27
124	08 Sep 2020	10	18.40	80.25	8.5	33.44	8.2	24.0	2.24
124	08 Sep 2020	11	18.40	79.72	8.5	33.44	8.2	24.0	2.27
37795	anteroteri Matetiro	98970	1955255	(0.02001000)	0.334.534	6308(2)(1)(3)	20736574 20	5701072	1903-8-55755 79

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pН	Dens (σ-t)	Chlor (µg/L)
124	14 Sep 2020	1	19.70	80.84	8.5	33.50	8.2	23.7	1.46
124	14 Sep 2020	2	19.50	80.71	8.4	33.52	8.2	23.8	1.65
124	14 Sep 2020	3	19.34	79.94	8.4	33.50	8.2	23.8	2.19
124	14 Sep 2020	4	19.11	78.54	8.3	33.51	8.2	23.9	2.80
124	14 Sep 2020	5 6	18.59	74.75	8.1	33.52	8.2	24.0	3.82
124	14 Sep 2020	6	17.82	72.49	7.8	33.51	8.1	24.2	4.50
124	14 Sep 2020	7	17.17	74.43	7.5	33.51	8.1	24.3	4.17
124	14 Sep 2020	8	16.96	77.31	7.4	33.47	8.1	24.4	3.21
124	14 Sep 2020	9	16.89	79.09	7.3	33.47	8.1	24.4	2.53
124	14 Sep 2020	10	16.68	79.03	7.3	33.48	8.1	24.4	2.28
124	14 Sep 2020	11	16.75	79.99	7.3	33.46	8.1	24.4	1.97
124	21 Sep 2020	1	19.04	86.53	8.2	33.48	8.1	23.8	0.59
124	21 Sep 2020	2 3 4	18.76	86.44	8.1	33.49	8.1	23.9	0.62
124	21 Sep 2020	3	18.38	85.64	8.2	33.48	8.1	24.0	0.68
124	21 Sep 2020	4	17.98	84.63	8.2	33.48	8.1	24.1	0.89
124	21 Sep 2020	5	17.56	83.47	8.2	33.47	8.1	24.2	1.09
124	21 Sep 2020	5 6	16.50	82.65	8.3	33.46	8.1	24.4	1.45
124	21 Sep 2020	7	15.86	82.06	8.0	33.47	8.1	24.6	1.89
124	21 Sep 2020	8	15.01	78.21	7.4	33.45	8.0	24.8	2.78
124	21 Sep 2020	9	14.60	71.68	7.0	33.44	8.0	24.9	4.30
124	21 Sep 2020	10	14.55	66.60	6.6	33.45	7.9	24.9	5.70
124	21 Sep 2020	11	14.38	65.99	6.2	33.45	7.9	24.9	5.64
124	20 500 2020	4	20.05	01.70	7.0	33.48	0.2	22.6	0.00
	28 Sep 2020	1	20.05	81.72	7.8		8.2	23.6	0.80
124	28 Sep 2020	2 3 4 5 6	19.90	81.69	7.8	33.49	8.2	23.6	0.90
124	28 Sep 2020	3	19.43	81.41	7.9	33.47	8.2	23.7	1.17
124	28 Sep 2020	4	18.93	80.37	7.8	33.47	8.1	23.9	1.22
124	28 Sep 2020	5	18.34	81.11	7.6	33.45	8.1	24.0	1.20
124	28 Sep 2020	6	17.71	80.84	7.5	33.46	8.1	24.2	1.25
124	28 Sep 2020	7	17.04	78.01	7.4	33.46	8.1	24.3	1.32
124	28 Sep 2020	8	16.58	73.30	7.5	33.45	8.1	24.4	1.37
124	28 Sep 2020	9	16.42	68.96	7.5	33.44	8.1	24.5	1.47
124	28 Sep 2020	10	16.42	55.84	7.6	33.43	8.1	24.4	1.53
124	28 Sep 2020	11	17.00	46.65	7.4	33.37	8.1	24.3	1.49
125	08 Sep 2020	1	18.38	81.79	8.6	33.44	8.2	24.0	2.04
125	08 Sep 2020		18.37	81.81	8.5	33.44	8.2	24.0	2.15
125	08 Sep 2020	2 3	18.37	81.88	8.5	33.44	8.2	24.0	2.24
		100							
125	08 Sep 2020	4	18.36	81.81	8.5	33.44	8.2	24.0	2.27
125	08 Sep 2020	5	18.37	81.72	8.6	33.44	8.2	24.0	2.37
125	08 Sep 2020	6	18.36	81.71	8.5	33.44	8.2	24.0	2.33
125	08 Sep 2020	7	18.35	81.42	8.5	33.44	8.2	24.0	2.28
125	08 Sep 2020	8	18.34	81.43	8.4	33.43	8.2	24.0	2.27
125	08 Sep 2020	9	18.34	81.41	8.4	33.43	8.2	24.0	2.21
125	14 Sep 2020	1	19.98	82.91	8.5	33.50	8.2	23.6	1.40
125	14 Sep 2020	2	19.91	82.67	8.4	33.51	8.2	23.6	1.53
125	14 Sep 2020	3	19.14	81.40	8.5	33.52	8.2	23.9	2.43
125	14 Sep 2020	4	18.72	78.91	8.3	33.50	8.2	23.9	3.30
125	14 Sep 2020	5	18.37	75.56	8.0	33.50	8.2	24.0	4.01
125	14 Sep 2020	4 5 6	17.62	74.42	7.8	33.49	8.1	24.2	4.84
125	14 Sep 2020	7	17.02	78.55	7.6	33.48	8.1	24.2	3.46
125		8		81.69	7.4	33.46		24.3	2.42
125	14 Sep 2020 14 Sep 2020	9	16.98 17.00	82.33	7.4	33.46	8.1 8.1	24.3	1.90
9870			9000000000 9749000000		255000		5.00	2000 00 00 00 00 00 00 00 00 00 00 00 00	1564 655
125	21 Sep 2020	1	19.25	87.31	8.1	33.48	8.1	23.8	0.49
125	21 Sep 2020	2 3	18.79	87.29	8.2	33.49	8.1	23.9	0.57
125	21 Sep 2020		18.40	87.03	8.2	33.48	8.1	24.0	0.62
125	21 Sep 2020	4	17.77	86.11	8.4	33.48	8.1	24.2	0.74
125	21 Sep 2020	5	17.34	84.67	8.4	33.47	8.1	24.3	0.98

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pН	Dens (σ-t)	Chlor (µg/L)
125	21 Sep 2020	6	16.33	82.39	8.3	33.46	8.1	24.5	1.37
125	21 Sep 2020	7	15.58	79.71	7.8	33.47	8.1	24.7	1.93
125	21 Sep 2020	8	14.74	75.01	7.1	33.46	8.0	24.8	2.92
125	21 Sep 2020	9	14.63	71.19	6.7	33.44	8.0	24.9	3.40
				10. (0.0,00.00.00.00.00.00.00.00.00.00.00.00.	07/04	100000000000000000000000000000000000000	0.20020	(700: 2,940)	UK-deriver.
125	28 Sep 2020	1	19.95	81.55	7.8	33.48	8.2	23.6	0.79
125	28 Sep 2020		19.95	81.47	7.8	33.48	8.2	23.6	0.81
125	28 Sep 2020	2	19.73	81.17	7.8	33.49	8.2	23.7	0.98
		3							
125	28 Sep 2020	2 3 4 5 6 7	19.12	80.27	7.9	33.47	8.2	23.8	1.31
125	28 Sep 2020	5	18.75	80.55	7.9	33.47	8.2	23.9	1.41
125	28 Sep 2020	6	17.79	82.35	7.9	33.48	8.2	24.2	1.53
125	28 Sep 2020		17.06	81.20	7.8	33.46	8.1	24.3	1.63
125	28 Sep 2020	8	16.98	75.84	7.7	33.44	8.1	24.3	1.44
125	28 Sep 2020	9	16.98	73.10	7.7	33.43	8.1	24.3	1.29
	- 2								
126	08 Sep 2020	1	18.45	79.12	8.4	33.42	8.2	24.0	2.03
126	08 Sep 2020		18.44	79.32	8.4	33.42	8.2	24.0	2.12
126	08 Sep 2020	3	18.42	79.82	8.4	33.42	8.2	24.0	2.24
126	08 Sep 2020	2 3 4	18.42	79.73	8.3	33.42	8.2	24.0	2.25
126	08 Sep 2020			79.73		33.42	8.2	24.0	
		5	18.42	BC36564428C4690	8.3				2.29
126	08 Sep 2020	6	18.42	79.64	8.3	33.42	8.2	24.0	2.34
126	08 Sep 2020	7 8	18.42	79.72	8.3	33.42	8.2	24.0	2.34
126	08 Sep 2020	8	18.42	79.60	8.3	33.42	8.2	24.0	2.33
126	08 Sep 2020	9	18.42	79.49	8.3	33.42	8.2	24.0	2.31
			1 Car (10 Car						
126	14 Sep 2020	1	19.93	81.56	8.5	33.51	8.2	23.6	1.23
126	14 Sep 2020		19.70	81.51	8.6	33.51	8.2	23.7	1.54
126	14 Sep 2020	3	19.64	81.40	8.6	33.51	8.2	23.7	1.82
126	14 Sep 2020	2 3 4	19.10	80.79	8.8	33.52	8.2	23.9	2.40
126	14 Sep 2020		18.54	79.34	8.9	33.50	8.2	24.0	3.06
126		5 6	18.01	78.80	8.9	33.50	8.2	24.1	3.49
	14 Sep 2020								
126	14 Sep 2020	7	17.80	78.54	8.7	33.48	8.2	24.2	3.98
126	14 Sep 2020	8	17.55	77.07	8.4	33.49	8.2	24.2	4.50
126	14 Sep 2020	9	16.66	77.16	8.1	33.47	8.1	24.4	3.53
			AND THE REST	19/9/19/19	7027020		70±030±0		Tarrioner .
126	21 Sep 2020	1	18.68	86.06	8.2	33.47	8.1	23.9	0.58
126	21 Sep 2020	2	18.35	86.09	8.2	33.49	8.1	24.0	0.62
126	21 Sep 2020	3	17.64	85.85	8.4	33.48	8.1	24.2	0.70
126	21 Sep 2020	4	17.30	85.04	8.6	33.46	8.1	24.3	0.89
126	21 Sep 2020	5	17.24	83.91	8.5	33.45	8.1	24.3	1.13
126	21 Sep 2020	6	16.76	82.98	8.5	33.46	8.1	24.4	1.39
126	21 Sep 2020	7	16.31	82.19	8.6	33.44	8.1	24.5	1.79
126	21 Sep 2020	8	16.12	81.38	8.5	33.43	8.1	24.5	2.71
126	21 Sep 2020	9	15.62	77.22	8.1	33.44	8.1	24.6	3.38
120	21 Sep 2020	9	10.02	11.22	0.1	55.44	0.1	24.0	3.30
126	28 Sep 2020	4	20.34	82.51	7.8	33.51	8.2	23.5	0.84
		1				Dec 2003 22 200 1 50			
126	28 Sep 2020	2 3	20.16	82.49	7.7	33.54	8.2	23.6	0.85
126	28 Sep 2020	3	19.45	82.54	7.9	33.50	8.2	23.8	0.89
126	28 Sep 2020	4	18.91	83.67	8.0	33.49	8.2	23.9	0.97
126	28 Sep 2020	5 6	18.25	83.24	7.9	33.50	8.1	24.1	1.11
126	28 Sep 2020	6	17.57	82.61	8.1	33.50	8.1	24.2	1.25
126	28 Sep 2020	7	17.10	82.29	8.2	33.47	8.1	24.3	1.39
126	28 Sep 2020	8	16.88	80.74	8.2	33.45	8.1	24.4	1.45
126	28 Sep 2020	9	16.84	78.57	8.1	33.44	8.1	24.4	1.45
100.00					12.000		5005605		
132	08 Sep 2020	1	19.56	78.75	7.6	33.49	8.1	23.7	3.01
132	08 Sep 2020		19.17	78.83	7.7	33.49	8.1	23.8	3.09
		2 3							
132	08 Sep 2020	3	18.89	79.33	7.7	33.47	8.1	23.9	3.21
132	08 Sep 2020	4	18.53	77.75	7.8	33.44	8.1	23.9	3.35
132	08 Sep 2020	5	18.39	76.95	7.8	33.43	8.1	24.0	3.35
132	08 Sep 2020	6	18.25	75.87	7.8	33.42	8.1	24.0	3.25

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	рН	Dens (σ-t)	Chlor (µg/L)
132	08 Sep 2020	7	18.23	75.37	7.8	33.42	8.1	24.0	3.13
132	08 Sep 2020	8	18.08	78.70	7.9	33.43	8.1	24.0	2.50
132	08 Sep 2020	9	17.90	77.49	7.9	33.43	8.1	24.1	2.33
132	08 Sep 2020	10	17.74	74.03	7.9	33.42	8.1	24.1	2.24
	Check bit for County and the refer they be a suit of the	200000			# 00000PM	N-49 300 3000	0.000	170,00,00,000	
132	14 Sep 2020	1	19.84	80.00	7.4	33.39	8.2	23.6	1.67
132	14 Sep 2020		19.60	79.70	8.0	33.57	8.2	23.8	3.55
132	14 Sep 2020	2 3 4	18.86	76.95	7.9	33.62	8.2	24.0	3.01
132	14 Sep 2020	1	18.43	74.11	7.6	33.72	8.1	24.2	2.75
132	14 Sep 2020	-	18.10	72.18	7.7	33.76	8.1	24.2	2.39
		5 6 7							
132	14 Sep 2020	6	17.38	71.92	7.8	33.99	8.1	24.6	2.17
132	14 Sep 2020		16.72	71.53	7.8	33.83	8.1	24.7	2.24
132	14 Sep 2020	8	16.61	72.24	7.6	33.63	8.1	24.6	3.09
132	14 Sep 2020	9	16.55	71.80	7.4	33.54	8.1	24.5	4.84
132	21 Sep 2020	4	19.29	78.16	7.9	33.48	8.1	23.8	0.93
		1							
132	21 Sep 2020	2	18.94	78.03	7.8	33.49	8.1	23.9	1.00
132	21 Sep 2020	2 3 4	18.20	76.49	8.0	33.47	8.1	24.1	1.11
132	21 Sep 2020		17.67	76.40	8.2	33.48	8.1	24.2	1.55
132	21 Sep 2020	5 6	17.16	77.60	8.4	33.47	8.1	24.3	2.18
132	21 Sep 2020	6	16.80	78.46	8.4	33.45	8.1	24.4	2.82
132	21 Sep 2020	7	16.70	77.03	8.3	33.45	8.1	24.4	3.34
132	21 Sep 2020	7 8	16.58	76.68	8.2	33.45	8.1	24.4	3.60
132	21 Sep 2020	9	16.35	75.50	8.1	33.45	8.1	24.5	3.85
132	21 Sep 2020	10	16.24	74.46	8.0	33.46	8.1	24.5	3.98
		~	121200 - 20000 15	00.8905550.05	Madition	122400 Perlos	Unic Service 1	- 2017/	**************************************
132	28 Sep 2020	1	20.35	78.14	7.8	33.54	8.2	23.6	1.17
132	28 Sep 2020	2	20.32	78.04	7.7	33.54	8.2	23.6	1.23
132	28 Sep 2020	2 3	19.97	76.98	7.6	33.54	8.2	23.7	1.42
132	28 Sep 2020	4	19.66	75.26	7.6	33.51	8.2	23.7	1.66
132	28 Sep 2020	5	19.05	71.75	7.7	33.49	8.2	23.9	2.05
132	28 Sep 2020	5 6	18.44	72.15	8.0	33.46	8.2	24.0	2.27
132	28 Sep 2020	7	17.93	78.74	8.2	33.44	8.2	24.1	2.30
132	28 Sep 2020	7 8	17.89	82.23	8.2	33.43	8.2	24.1	2.25
		0							2.13
132	28 Sep 2020	9 10	17.50	82.25	8.2	33.44	8.2	24.2	
132	28 Sep 2020	10	17.56	80.97	8.2	33.43	8.2	24.2	2.14
139	08 Sep 2020	1	19.11	85.45	8.2	33.48	8.2	23.8	2.00
139	08 Sep 2020	2	19.01	85.50	8.2	33.48	8.2	23.9	2.10
139	08 Sep 2020	3	18.78	85.02	8.3	33.48	8.2	23.9	2.29
139	08 Sep 2020	4	18.46	84.77	8.4	33.47	8.2	24.0	2.16
139	08 Sep 2020	5	18.18	84.94	8.5	33.47	8.2	24.1	2.24
139	08 Sep 2020	6	18.04	83.82	8.5	33.45	8.2	24.1	2.50
139	08 Sep 2020	7	17.98	82.36	8.4	33.45	8.2	24.1	2.75
139	08 Sep 2020	8	17.96	80.73	8.4	33.44	8.2	24.1	2.89
139	08 Sep 2020	9	17.89	79.86	8.4	33.44	8.2	24.1	2.94
139	08 Sep 2020	10	17.82	79.32	8.4	33.44	8.2	24.1	3.04
139	08 Sep 2020	11	17.79	78.38	8.5	33.45	8.2	24.1	3.10
139	08 Sep 2020	12	17.61	79.30	8.5	33.46	8.2	24.2	3.13
139	08 Sep 2020	13	17.41	80.04	8.6	33.46	8.2	24.2	3.20
139	08 Sep 2020	14	17.33	80.11	8.6	33.45	8.2	24.2	3.31
139	08 Sep 2020	15	17.11	80.06	8.6	33.46	8.2	24.3	3.26
139	08 Sep 2020	16	16.98	80.58	8.7	33.46	8.2	24.3	3.20
139	08 Sep 2020	17	16.99	81.01	8.7	33.45	8.2	24.3	3.25
139	08 Sep 2020	18	16.69	81.10	8.6	33.47	8.2	24.4	3.20
72.2		12.00	22522	22623	12.5		100	22 E	
139	14 Sep 2020	1	20.02	86.09	8.4	33.52	8.2	23.6	0.80
139	14 Sep 2020	2	19.93	85.91	8.5	33.52	8.2	23.6	0.95
139	14 Sep 2020	3	19.89	85.09	8.4	33.51	8.2	23.7	1.24
139	14 Sep 2020	4	18.43	83.90	8.6	33.57	8.2	24.1	1.78
139	14 Sep 2020	5	16.98	81.87	8.8	33.49	8.2	24.4	2.36

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	рН	Dens (σ-t)	Chlor (μg/L)
139	14 Sep 2020	6	16.73	81.69	8.7	33.47	8.2	24.4	2.74
139	14 Sep 2020	7	16.63	81.59	8.8	33.46	8.2	24.4	3.06
139	14 Sep 2020	8	16.61	81.42	8.8	33.46	8.2	24.4	3.31
139	14 Sep 2020	9	16.48	81.60	8.8	33.46	8.2	24.5	3.53
139	14 Sep 2020	10	15.96	82.14	8.6	33.47	8.2	24.6	3.81
139	14 Sep 2020	11	15.47	82.32	8.3	33.46	8.1	24.7	4.34
139	14 Sep 2020	12	15.39	82.31	8.0	33.45	8.1	24.7	4.44
139	14 Sep 2020	13	15.22	82.52	7.7	33.46	8.1	24.7	4.19
139	14 Sep 2020	14	15.07	83.18	7.4	33.46	8.1	24.8	3.71
139	14 Sep 2020	15	15.09	83.49	7.3	33.46	8.0	24.8	3.57
139	14 Sep 2020	16	14.83	84.57	7.2	33.47	8.0	24.8	3.27
139	14 Sep 2020	17	14.81	84.96	7.2	33.46	8.0	24.8	2.98
139	14 Sep 2020	18	14.68	85.02	7.2	33.47	8.0	24.9	2.77
139	21 Sep 2020	1	17.80	85.73	8.4	33.46	8.1	24.1	1.04
139	21 Sep 2020		17.18	84.81	8.5	33.48	8.1	24.3	1.30
139	21 Sep 2020	2 3	16.84	83.07	8.6	33.45	8.1	24.4	1.58
139	21 Sep 2020	4	16.62	82.25	8.7	33.45	8.1	24.4	1.66
139	21 Sep 2020	5	16.49	82.09	8.6	33.44	8.1	24.4	1.69
139	21 Sep 2020	6	15.91	82.21	8.6	33.44	8.1	24.6	1.83
139	21 Sep 2020	7	15.66	81.63	8.6	33.42	8.1	24.6	2.37
139	21 Sep 2020	7 8	15.39	81.04	8.4	33.43	8.1	24.7	3.09
139	21 Sep 2020	9	15.05	79.64	8.0	33.44	8.1	24.8	3.82
139	21 Sep 2020	10	14.62	79.05	7.6	33.44	8.0	24.9	4.28
139		11	13.96	80.29	7.0	33.46	8.0	25.0	4.02
139	21 Sep 2020	12					7.9		
	21 Sep 2020		13.79	82.70	6.9	33.45	1,274,250,27	25.0	3.71
139	21 Sep 2020	13	13.69	83.99	6.8	33.46	7.9	25.1	3.70
139	21 Sep 2020	14	13.70	84.79	6.8	33.45	7.9	25.1	3.70
139	21 Sep 2020	15	13.65	85.18	6.7	33.46	7.9	25.1	3.73
139	21 Sep 2020	16	13.65	85.29	6.7	33.46	7.9	25.1	3.65
139	21 Sep 2020	17	13.64	85.57	6.7	33.46	7.9	25.1	3.59
139	21 Sep 2020	18	13.64	85.68	6.7	33.47	7.9	25.1	3.58
139	28 Sep 2020	1	19.77	84.00	8.0	33.49	8.2	23.7	0.87
139	28 Sep 2020	2 3	19.73	83.66	8.0	33.49	8.2	23.7	0.94
139	28 Sep 2020	3	19.64	83.39	7.9	33.49	8.2	23.7	1.14
139	28 Sep 2020	4	19.54	82.91	8.0	33.49	8.2	23.7	1.35
139	28 Sep 2020	5	19.49	83.10	8.0	33.48	8.2	23.7	1.46
139	28 Sep 2020	6	19.38	83.40	8.0	33.48	8.2	23.8	1.60
139	28 Sep 2020	7	19.07	83.49	8.0	33.48	8.2	23.8	1.75
139	28 Sep 2020	8	18.73	82.97	8.2	33.47	8.2	23.9	1.79
139	28 Sep 2020	9	18.60	83.18	8.3	33.46	8.2	23.9	1.64
139	28 Sep 2020	10	18.02	84.33	8.5	33.48	8.2	24.1	1.51
139	28 Sep 2020	11	17.76	85.66	8.6	33.45	8.2	24.1	1.48
139	28 Sep 2020	12	17.38	85.04	8.6	33.45	8.2	24.2	1.73
139	28 Sep 2020	13	17.10	82.38	8.6	33.44	8.2	24.3	1.82
139	28 Sep 2020	14	16.94	81.90	8.6	33.44	8.2	24.3	1.80
139	28 Sep 2020	15	16.81	81.96	8.6	33.44	8.2	24.4	1.87
139	28 Sep 2020	16	16.63	82.33	8.5	33.44	8.2	24.4	1.98
139	28 Sep 2020	17	16.03	82.13	8.2	33.46	8.1	24.5	1.87
139	28 Sep 2020	18	15.45	80.49	8.0	33.46	8.1	24.7	1.78
140	08 Sep 2020	1	18.63	79.26	8.5	33.43	8.2	23.9	2.57
140	08 Sep 2020	2	18.62	79.20	8.5	33.42	8.2	23.9	2.71
140	08 Sep 2020	3	18.62	79.37	8.5	33.42	8.2	23.9	2.83
		3							
140	08 Sep 2020	4	18.62	79.50	8.4	33.43	8.2	23.9	2.93
140	08 Sep 2020	5 6	18.62	79.44	8.4	33.43	8.2	23.9	3.01
140	08 Sep 2020	6	18.61	79.49	8.4	33.43	8.2	23.9	3.02
140	08 Sep 2020	7	18.61	79.40	8.4	33.43	8.2	23.9	3.06
140	08 Sep 2020	8	18.60	79.23	8.3	33.43	8.2	23.9	3.13
140	08 Sep 2020	9	18.59	79.04	8.3	33.43	8.2	23.9	3.10

Station	Date	Depth (m)	Temp (°C)	XMS (%)	DO (mg/L)	Sal (ppt)	pН	Dens (σ-t)	Chlor (µg/L)
140	08 Sep 2020	10	18.55	77.54	8.3	33.43	8.2	23.9	2.95
140	14 Sep 2020	1	19.08	73.96	8.0	33.49	8.1	23.8	2.42
140	14 Sep 2020	2 3	19.05	73.52	8.0	33.49	8.1	23.9	2.67
140	14 Sep 2020		18.61	72.72	8.2	33.50	8.2	24.0	3.88
140	14 Sep 2020	4	18.56	71.70	8.2	33.48	8.2	24.0	4.94
140	14 Sep 2020	5	18.26	71.02	8.4	33.49	8.2	24.1	6.41
140	14 Sep 2020	6	18.12	69.37	8.5	33.48	8.2	24.1	8.19
140	14 Sep 2020	7	18.11	67.59	8.5	33.48	8.2	24.1	8.68
140	14 Sep 2020	8	17.89	68.58	8.4	33.49	8.2	24.1	7.81
140	14 Sep 2020	9	17.37	71.57	8.3	33.48	8.1	24.3	6.45
140	14 Sep 2020	10	17.01	74.11	8.2	33.47	8.1	24.3	4.88
140	21 Sep 2020	1	19.11	76.14	7.8	33.47	8.1	23.8	0.95
140	21 Sep 2020	2	18.47	76.01	7.8	33.49	8.1	24.0	1.04
140	21 Sep 2020	2 3 4	17.71	76.86	8.2	33.48	8.1	24.2	1.14
140	21 Sep 2020	4	17.38	78.68	8.2	33.47	8.1	24.2	1.34
140	21 Sep 2020		16.96	79.23	8.3	33.46	8.1	24.3	1.64
140	21 Sep 2020	5 6	16.63	79.64	8.2	33.45	8.1	24.4	1.96
140	21 Sep 2020	7	15.94	79.52	7.6	33.47	8.1	24.6	2.63
140	21 Sep 2020	8	14.86	74.39	7.1	33.47	8.0	24.8	4.04
140	21 Sep 2020	9	14.59	67.76	6.7	33.45	8.0	24.9	5.90
140	21 Sep 2020	10	14.56	62.62	6.3	33.44	7.9	24.9	6.04
140	28 Sep 2020	1	19.98	75.18	7.3	33.50	8.1	23.6	0.66
140	28 Sep 2020	2	19.94	74.90	7.3	33.50	8.1	23.6	0.77
140	28 Sep 2020	2 3 4	19.79	74.52	7.3	33.49	8.1	23.7	1.09
140	28 Sep 2020	4	19.55	73.45	7.3	33.48	8.1	23.7	1.40
140	28 Sep 2020	5	18.81	72.16	7.2	33.48	8.1	23.9	1.52
140	28 Sep 2020	6	17.57	73.12	7.5	33.47	8.1	24.2	1.70
140	28 Sep 2020	7	16.91	75.67	7.6	33.45	8.1	24.3	1.74
140	28 Sep 2020	8	16.71	73.28	7.3	33.44	8.1	24.4	1.74
140	28 Sep 2020	9	16.36	54.31	7.1	33.44	8.1	24.5	1.94
140	28 Sep 2020	10	16.25	20.55	7.2	33.42	8.1	24.5	2.14

NA = not available

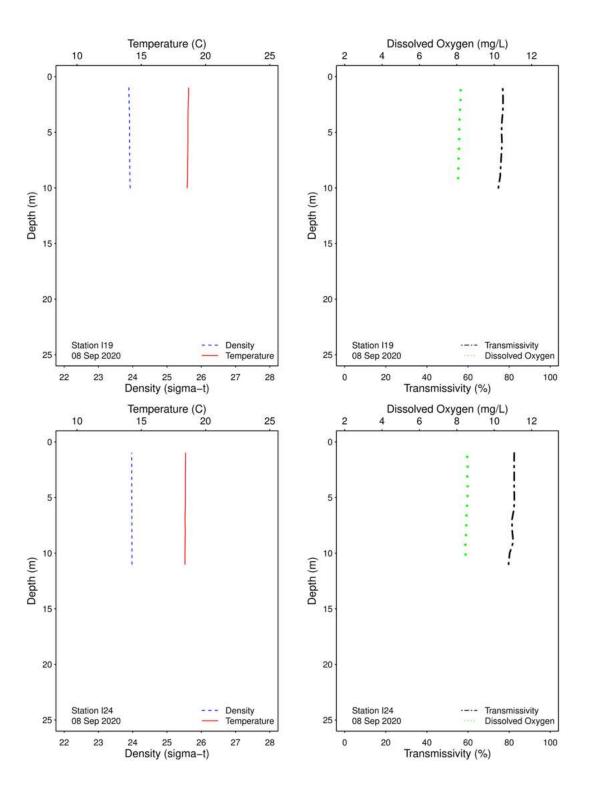


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

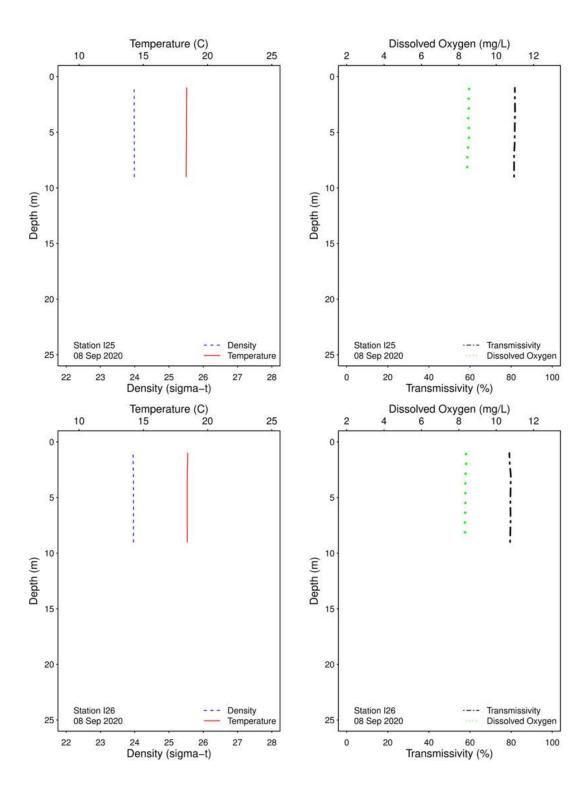


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

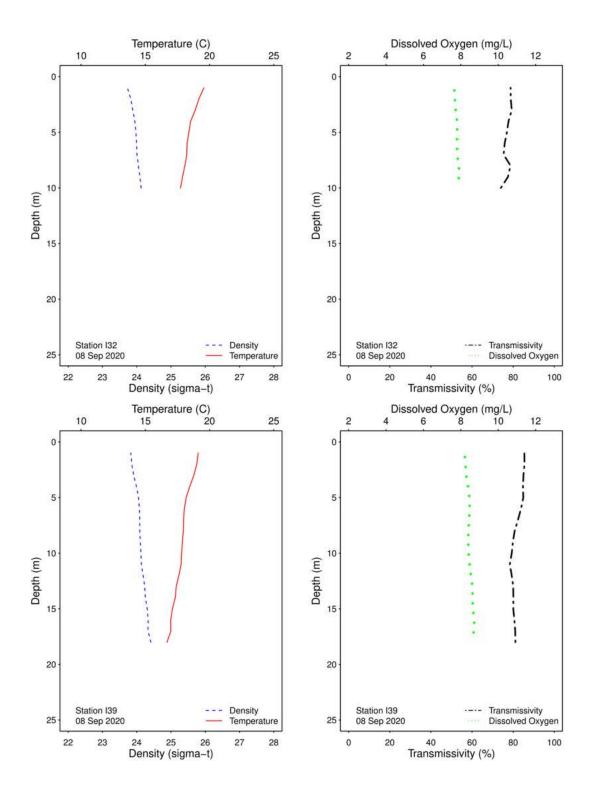


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

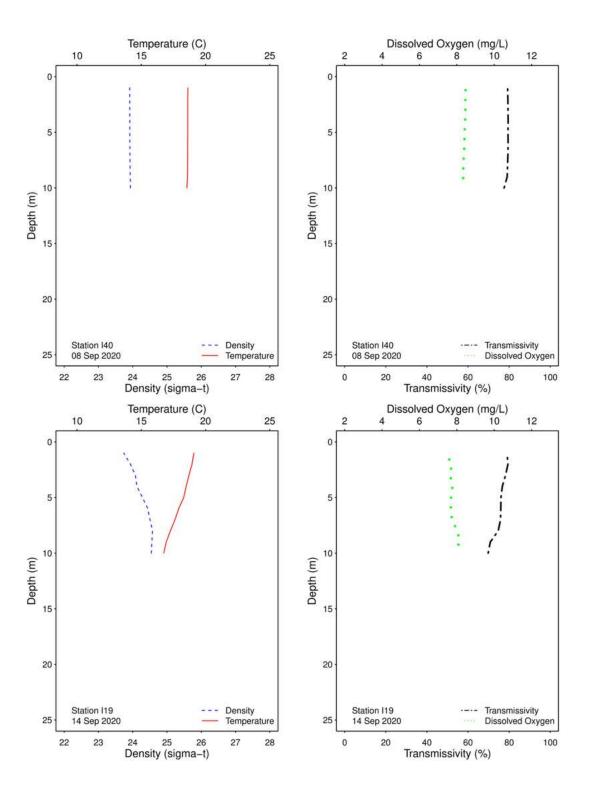


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

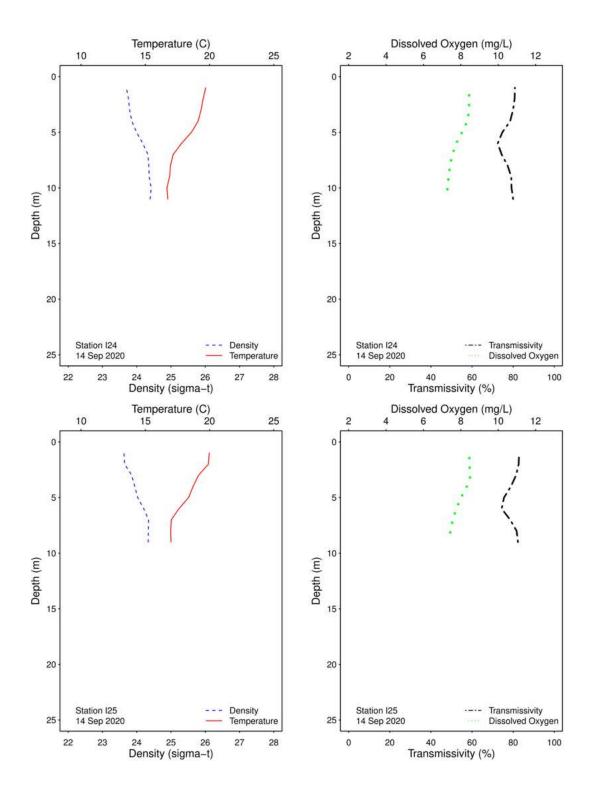


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

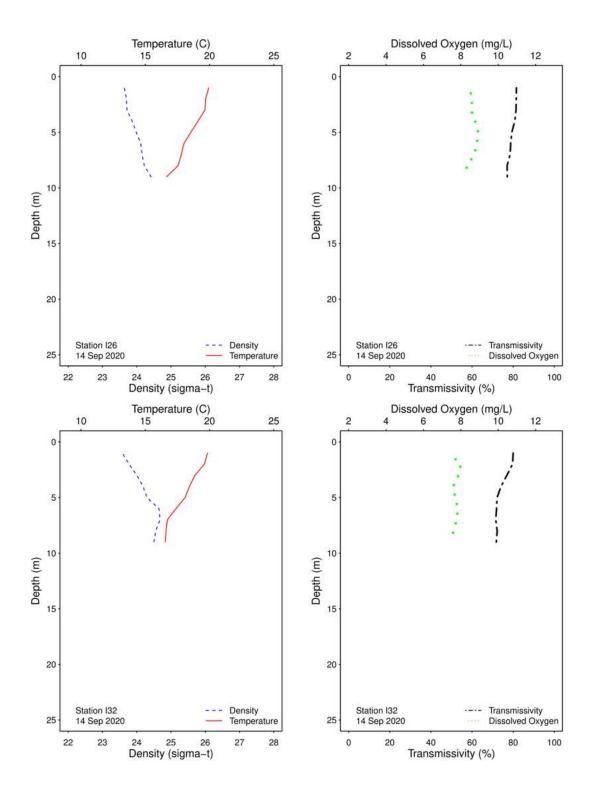


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

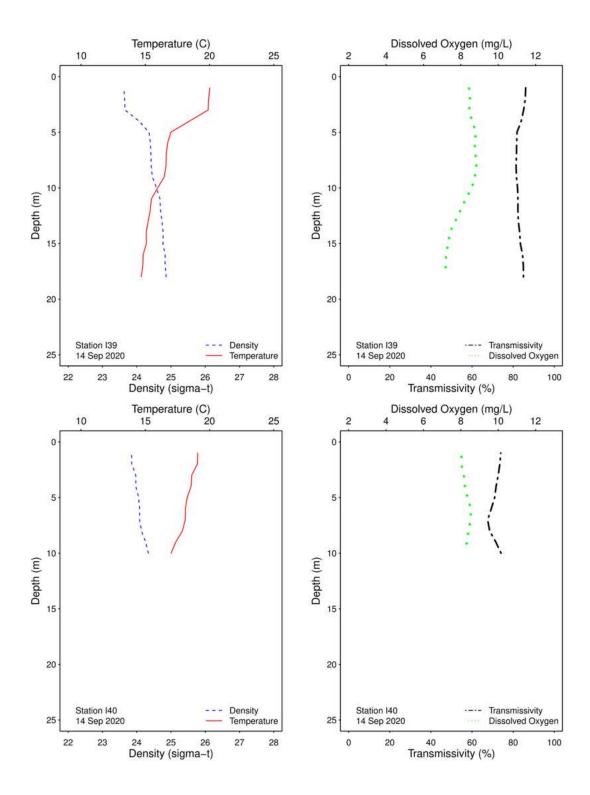


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

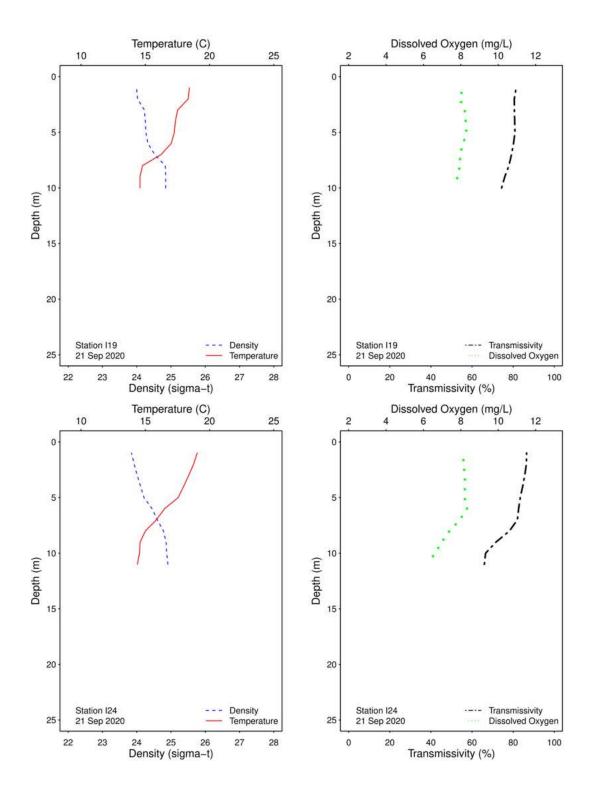


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

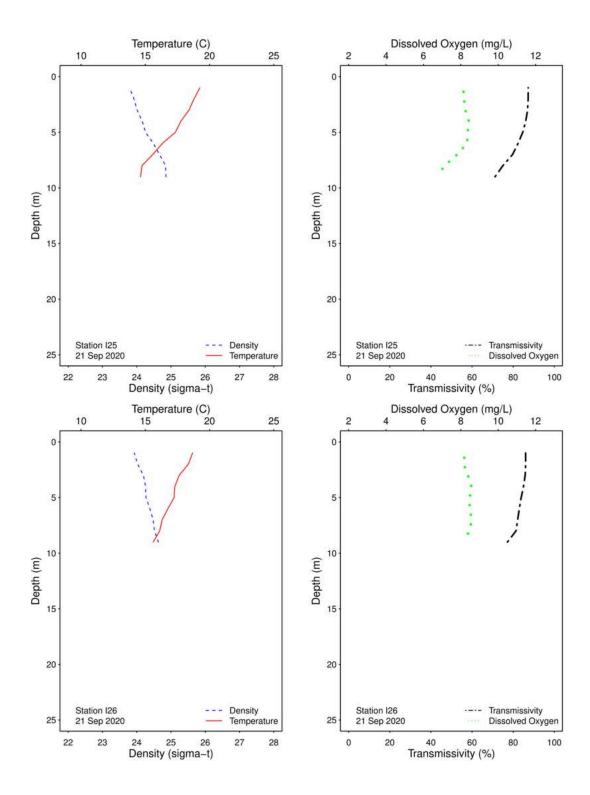


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

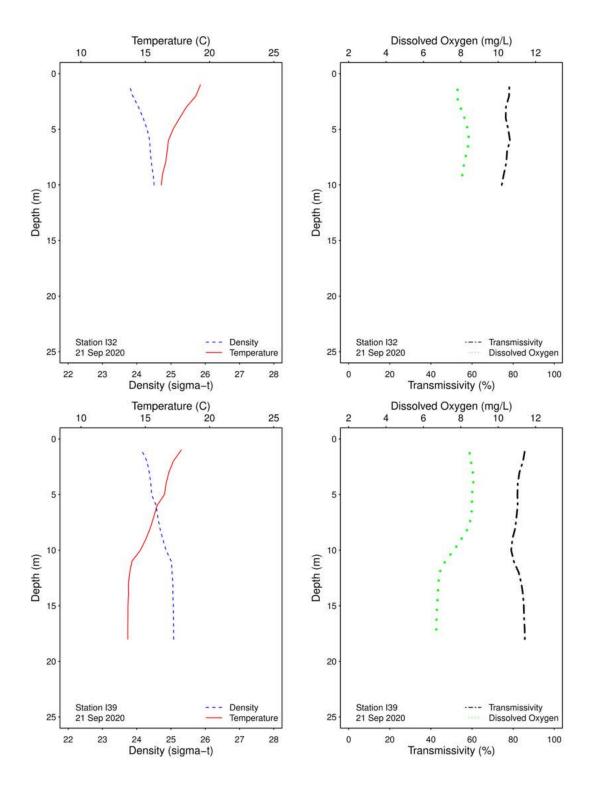


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

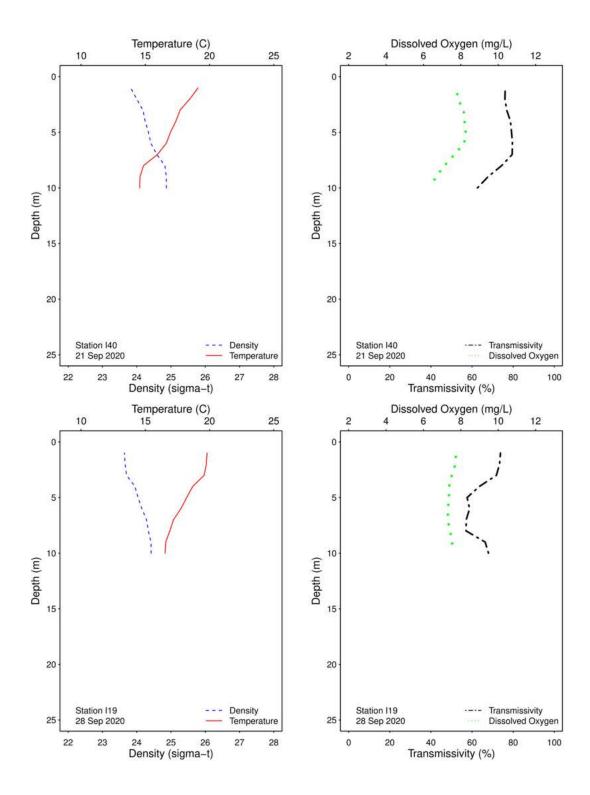


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

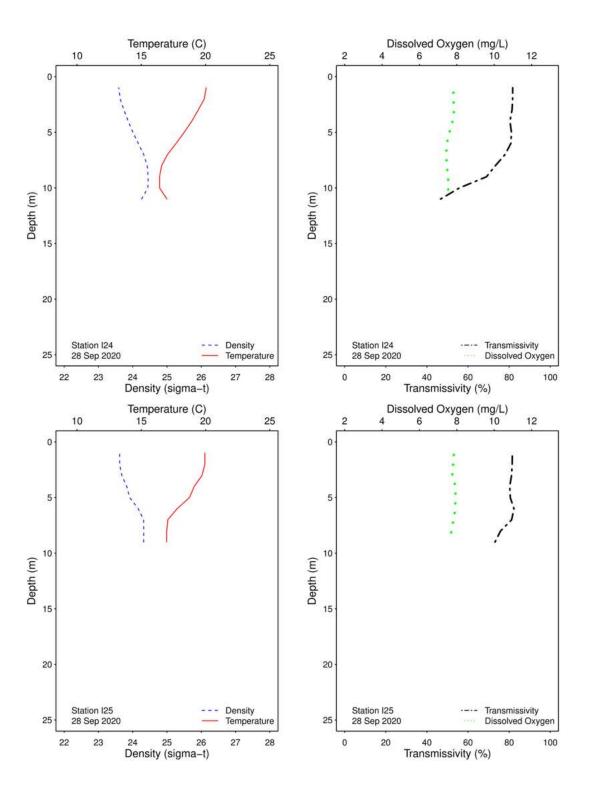


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

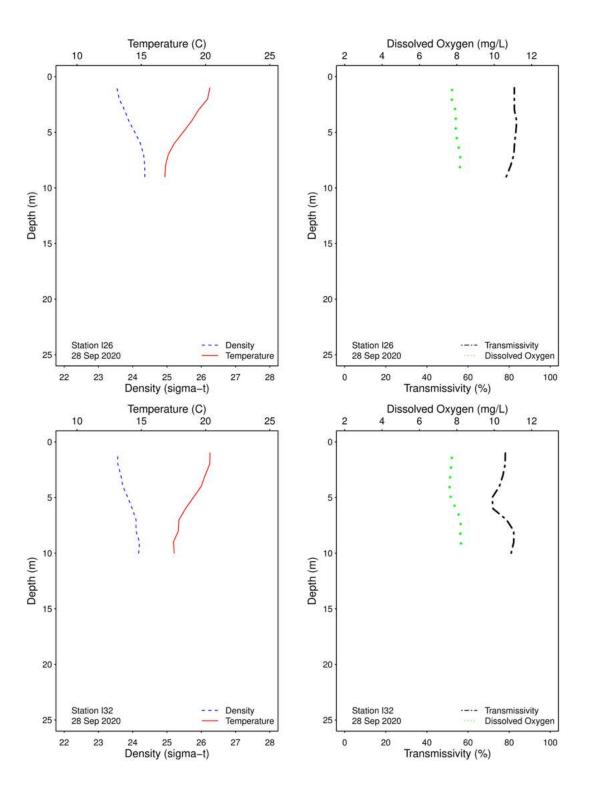


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

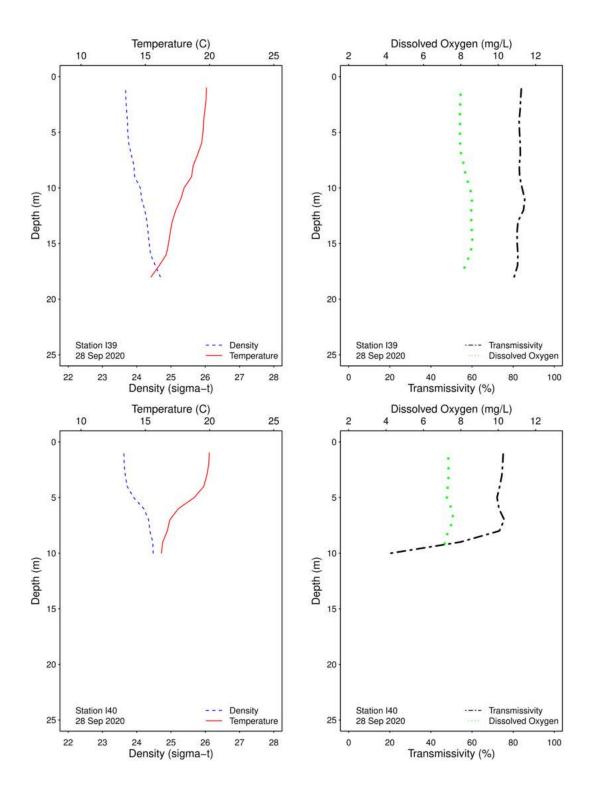


Figure 3.1: Graphics of CTD profile data from the SBOO kelp stations for each sample date.

APPENDIX A
Quality Assurance

Table A.1Summary of bacteriological quality assurance field and lab duplicate sample analyses at selected SBOO stations. Densities of total coliform (Total), fecal coliform (Fecal), and *Enterococcus* (Entero) are reported as CFU/100 mL.

Station	Date	Depth	Analyst	Procedure	Total	Fecal	Entero
119	08 Sep 2020	6	JF	LAB DUPLICATE	12000	3600e	1100
119	14 Sep 2020	6	JF	LAB DUPLICATE	2e	<2	<2
119	21 Sep 2020	6	AE	LAB DUPLICATE	<2	<2	<2
119	28 Sep 2020	6	BS	LAB DUPLICATE	<20	<2	<2
140	08 Sep 2020	6	JF	LAB DUPLICATE	8600	2400e	700
140	14 Sep 2020	6	JF	LAB DUPLICATE	<20	<2	<2
140	21 Sep 2020	6	AE	LAB DUPLICATE	<2	<2	<2
140	28 Sep 2020	6	JF	LAB DUPLICATE	<2	<2	2e
S12	01 Sep 2020		BS	FIELD DUPLICATE	40e	8e	14e
S12	01 Sep 2020		BS	LAB DUPLICATE	40e	20e	24e
S12	08 Sep 2020		JF	FIELD DUPLICATE	1200	<200	120e
S12	08 Sep 2020		JF	LAB DUPLICATE	1800e	400	320e
S12	15 Sep 2020		JF	FIELD DUPLICATE	20e	16e	<2
S12	15 Sep 2020		JF	LAB DUPLICATE	<20	12e	<2
S12	22 Sep 2020		AE	FIELD DUPLICATE	<20	20e	<2
S12	22 Sep 2020		AE	LAB DUPLICATE	40e	<20	<2
S12	29 Sep 2020		AE	FIELD DUPLICATE	<20	20e	2e
S12	29 Sep 2020		AE	LAB DUPLICATE	<20	<20	ns

ns = not sampled ND = no data

